ROCKY MOUNTAIN MEDICAL JOURNAL

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A medical potpourri

Compiled by Andrew M. Babey, M.D., Las Cruces, New Mexico

1. "My intelligence, such as it is, has been steadily decaying since the age of twenty. When I was young I liked mathematics. When this became too difficult for me, I took to philosophy, and when philosophy became too difficult, I took to politics. Since then I have concentrated on detective stories." Autobiographical comment by Bertrand Russell, "This is my Philosophy," edited by W. Burnett, 1957.

2. "Finally, a word about the aging individual. I have already referred to the effect of nicotinic acid in relieving the symptoms of cerebral arteriosclerosis even when no skin lesions of pellagra are seen. The lonely, inactive, aging individual, edentulous, lacking energy and often suffering the aches and pains of old age, presents a special problem in nutrition that can be one of the most difficult to manage. I mention the problem here only to urge that you keep the possibility of B vitamin malnutrition in mind as you care for them." Sebrell, W. H., Jr.: Some Clinical Aspects of Vitamin B Deficiencies, Am. J. Med. **25**:678 (November) 1958.

3. "Evidence has been presented which suggests that 'rum fits,' the spontaneous convulsions occurring during alcohol withdrawal in patients who are not epileptics, are due to Vitamin B deficiency." Davidson, Charles S.: Diet in the Treatment of Liver Disease, Am. J. Med. **25**:692 (November) 1958.

4. "Most failures of the sodium restricted diet to halt the relentless formation of ascites, thus leading to inevitable paracentesis, are due to lack of knowledge of sources of sodium by the doctor, dietitian or patient, or lack of understanding of the necessity of severe restriction. Occasional patients must have fluid restriction also, as they are avid 'water savers,' but here the restriction of fluids is seldom to less than 1,500 to 2,000 cc. a day and rarely if ever to the point of thirst." ibid. **25**:694 (November) 1958.

5. "Fortunately, most patients with liver disease, even when it is severe, are not susceptible to hepatic coma so that, for example diuretics may be used and the protein in a normal diet or even a high protein diet, when desired, is harmless. Nevertheless, in a few susceptible patients the typical manifestations of impending hepatic coma will develop which will progress on to deep coma and even to a fatal termination when the protein in the diet is not tolerated." ibid. **25**:695 (November) 1958.

6. "The first great thing is to find yourself, and for that you need solitude and contemplation, at least sometimes. I tell you deliverance will not come from the rushing, noisy centres of civilization. It will come from the lonely places." Fridtjof Nansen cited by Pickering, Sir George: Medicine's Challenge to the Educator, Brit. M. J. **2**:1118 (Nov. 18) 1958.

7. "The closure of a proved atrial septal defect can now be regarded in the same light as a persistent ductus; that is, to prevent the ill effects of the shunt on the heart and pulmonary bed. It is quite wrong to wait for the development of symptoms." Chin, E. F., and Ross, D. N.: Surgery of Atrial Septal Defects, Brit. M. J. **2**:1131 (Nov. 18) 1958.

8. "We general practitioners have borne the brunt of these attacks for long enough and now we must unite and fight these pharmaceutical firms who, using all the wiles and subtleties known to advertisement psychologists, try to degrade our profession by badgering us into using their drugs. They have studied us and worked upon us as if we were a band of immoral morons, who, if bribed with free gifts and outings and given free samples and pretty pictures by well-groomed men of charm and wit, will prescribe anything they happen to suggest to us." Rayner, Mary M.: Correspondence: Pharmaceutical Houses and the Doctor, Brit. M. J. **2**:1291 (Nov. 8) 1958.

9. "Experience in the last 15 years has revealed that about 40 per cent of patients with autoimmune hemolytic anemia have an underlying disease, most frequently lymphoma, lymphocytic leukemia, or diffuse collagen disease." Young,

continued on 121

Sane or Insane?

LINES OF DEMARCATION are indistinct between extremes of the physiologic states of human minds and bodies—sick, well; happy, unhappy; rest, unrest; real, unreal; tolerable, intolerable; curable, incurable. And, sane or insane!

Unfortunately, medicine is not an exact science, and opinions of physicians vary with training, age and experience. People are aware of this; hence they often "shop" for opinions, sometimes until they hear what they hope to hear, be it for their best interests or not. Patients' response to treatment varies with personal feelings toward the doctor and, above all, confidence in his ability to cure disease or conduct the patient safely through a crisis. Here is the reason for apparent success, usually transitory, of "systems" of healing, nostrums and quackery; treatment of any sort may be accorded credit which it, as such, does not deserve! Furthermore, personal confidence is the key to our philosophy and ideals concerning free choice of physician.

The confidence of people in medicine is disturbed when doctors publicly disagree. Glaring disagreements conspicuously and adversely color medical testimony in preliminary studies of criminals and crimes, the trials, verdicts and sentences. Some who seriously debate these problems fail to understand why the death penalty is not as appropriate, if not more so, if the criminal *is* insane. They ask: "Is he not more dangerous, and less worthy to survive and perhaps return to society, than one who is legally sane?" It is true that his victims are just as dead, the survivors just as bereaved, and his possible future victims more insecure, than if he were sane. Who is more deserving of probation and salvation: the sane criminal or one afflicted by insanity of any degree or duration? Those who cannot decide whether a prisoner is sane or insane too often go even further afield in trying to predict whether a psychopathic state is temporary or permanent! One might defend the premise that *any* unconventional act which willfully robs another human being of his life is outside the limits of so-called sanity!

In view of the public disagreements of our psychiatric colleagues, why not call on enough of them to procure an equal number of verdicts for sane and insane — perhaps three yea and three nay? Then, and therefore, throw out the evidence thus found wanting. The attestors could get in a private huddle and study it out among themselves. Some interesting and revealing diagnoses might be forthcoming!

Look!

WHEN INSULTED, one may be torn between desires to fight back or to ignore the whole thing. That's what happened when the magazine recently took after us and our hospitals in a glaring article damning some five thousand hospitals, plus an implied blanket condemnation of a hundred thousand or more physicians. The "report" was obviously an unofficial and prejudiced pot-muddler based upon alleged inspection of a small handful of non-representative institutions. Unfortunately, tens of thousands of readers believe what they see in print and "go for" the sensational. This is particularly unfortunate when confidence in physicians and hospitals is damaged.

The following letter was sent to the publishers of Look, with a copy to one of our colleagues, by a patient:

I have just finished reading your story entitled, "Report on Hospitals." I am a newspaperman, of many years' experience, and am thoroughly astonished at your magazine publishing that kind of a story, so poorly written and documented. The story seems to indicate that your investigators started out knowing NOTHING about hospitals, found out NOTHING of importance about them, and ended up knowing less than when they started.

I am not a doctor or a nurse, merely a patient on four occasions, all for major operations. First, for an inflamed appendix; second, for a mashed

hand; third, for kidney and bladder; and fourth, for kidney stone. I was in three different hospitals, miles apart. In each instance my case was intelligently diagnosed and treated by the physicians and surgeons, and I was well cared for by the nursing staff. There was never a moment in which I was neglected or badly treated. Everyone did his best to make me as comfortable as possible and aid me in "pulling through."

Your statement (among others) that clothes, money, and jewelry are taken away from a patient while being treated, is so asinine that it deserves no mention. That is the only sensible way to take care of patients' property! Your "Patient's Bill of Rights" is perfectly silly. The guy that wrote that must have been in a mental ward.

Not only are the facts about my case true, but I had the chance to observe many other patients and they were all treated well by the entire personnel of the hospital. There was always the deepest interest in each individual case by the medical staff and nurses. But for their watchful care, I and many others would not be alive today. In my judgment your article is a libel on the finest institutions and professional men on this earth. I most respectfully ask you to publish this letter, in the interest of the TRUTH about hospitals and their problems.

Perhaps this answers Look better than could any one of us. The sole reason for our existence as physicians is to serve, to cure when possible, but always to give hope and comfort. We feel that the above letter expresses the feelings of the majority of people and that the vicious article in Look is nothing but the type of prattle we may expect occasionally from a disgruntled few.

Staffylocide

AS LONG AS WE ARE ABOUT TO PARAPHRASE a monumental poem of World War I, let's start off with a comparable desecration of a perfectly good medical word. The medical dictionary defines staphylocide as "destructive to staphylococci." Now, glance again at the title of this editorial — and take over from there!

For many months the staphylococcus has been enemy number one in our hospitals. He (like an enemy, during the war, referred to as "he") has been maligned and upbraided, and deserves it. As flies and other insects developed immunity to DDT in the late forties, perhaps the Staph. has done as much toward the biocidal substances of today. Could it be that bacteria have mobilized their forces, joined the commies, and decided to show mankind who's boss?

There is an as yet unidentified genius at large and in our midst. It must be a colleague, for the following gem was found posted on the bulletin board near the entrance to a place where nurses cannot go (at least during working hours):

IN ST. LUKE'S FIELDS

In St. Luke's fields the cocci grow
Between the bedpans row on row
That grace the shelves. While on the floors
The nurses spawn them in their drawers
Where laboratories cannot go.
Benighted staff! Scarce months ago
You laughed and sang, saw sunset's glow,
But now you cry.
Take up the struggle with the foe,
With courage and alertness throw
The torch. Hear now the clarion cry
All pathogenic germs must die.
You shall not sleep, while cocci grow
In St. Luke's fields.

—With apologies to
Lt. Col. McRae.

Thank you, our sonneteer! Please come again to bolster our morale and augment our courage as we wage the present war. When at last the battle is won, here is a suggested title for the song of victory: "Staff Conquers Staph."

There are many serious notes in the staphylococcic threat, as in any challenge concerning life and health. Some physicians have asked how great is the problem; a few state they haven't seen a serious Staph. infection for years. Maybe they haven't really looked; perhaps they have ordered antibiotics as shots in the dark without antibiotic sensitivity tests; and perchance they haven't seen a good job of surgery undone or a patient succumb to staphylococcic bacteremia. One thing is certain, that the problem has ridden into the international spotlight, and first-rate hospitals everywhere have appointed committees on infection and cross-infection. And at least one tangible reward has come into being—better housekeeping in our workshops, the hospitals. Furthermore, lax aseptic consciences have been goaded and importance of personal hygiene among ourselves and ancillary workers has been re-awakened. Any committee which hasn't accomplished this has not done its job.

Medicine at the crossroads

T. K. Callister, M.D., Oceanside, Calif.

Timely comment upon recent socio-economic A.M.A. activities. Attention is called to the fact we are participating in a changing national and international philosophy of life and its social and political economy—whether we like it or not—and must individualize our own problems as individuals and as a business enterprise.

THREE HIGHLY SIGNIFICANT STEPS were recently taken by the American Medical Association. The House of Delegates, meeting in Minneapolis, approved: (a) creation of a Division of Socio-economic Activities; (b) a recommendation re-wording objectives of the A.M.A. to incorporate recognition of socio-economics as a basic step in the promotion of better medicine; and (c) an urging of the Board of Trustees to open the publications of the association to discussions of economic problems of medicine.

No greater need exists and no greater unifying force can emerge than this recognition that all doctors have one thing in common—one common rallying point—the need to protect the economic and social status of medicine in the decade ahead.

Many definitions exist of what constitutes socialized medicine. If socialization simply means restricted choice of doctor, then the above steps were in great part needless. If, however, socialized medicine means the regulation of fees, procedures and clientele, and third-party initiation, payment and administration, then we not only now have a large share of socialism but a frightening potential ahead.

It is the purpose of this article not to appraise what has been lost but to explore where next the pressures will occur, and to suggest a means to bend the influences at work in a fashion to permit a future for independent medicine.

It is an accepted fact that since World War II the United States has been following a course of socialism within the capitalistic structure. The entire concept of security from cradle to grave has had its general acceptance during this period. The impact of taxes and inflation has been to redistribute wealth. The size, cost, and controls of government are those associated with socialism.

Domestic needs

If there be any question of the economic leveling process of this social evolution and its possible significance to the future economic status of doctors, review these figures. In 1929 corporate profits were 6.1 per cent of sales, but by 1956 had fallen to 2.7 per cent! The most significant fact in this transition from the capitalistic to the socialistic economy is that in greater part it has not been deliberately planned. The evolution has been natural, demanded by the majority of people and accelerated by the world's unrest and the domestic needs of the times. It is essential to see this trend of government in order to appraise the future position of medicine in the social structure. Medicine is integrally tied with the political wishes of the people. It exists as an independent profession only

by choice or sufferance of the body politic, and whatever be the trend of socio-politics, the socio-economics of medicine will run a parallel course.

How then, within the fabric of social change, can we maintain a position of independence for medicine? As has been said, "We cannot stay the social revolution, but we can enter the fight to shape it in the image of our concepts." And so we must, with foresight as to where the attacks will rise and with plans to envelop them within our concept of right.

The next attacks will occur from three groups of our society: (a) employees in government; (b) those 65 years of age and older; and (c) unionized employees. These are not new pressures, but their combined force is only now in the pre-cyclonic phase.

Government major employer

Ten years ago there were 50 per cent less people on government pay rolls. Today one of every six employed adults receives his chief remuneration from government. The trend will continue because the demands upon city and state government are in a dramatic growth-phase. Five years hence, one in five of all wage-earners will be hired by government. It is significant that this proportion is higher than that of registered communists in socialistic Russia!

The significance of this to medicine is that government workers are by definition socialized employees and have already by law socialized their tenure, their pensions, seniority and similar benefits. The history of socialism abroad confirms that government workers tend to be pioneers in seeking and obtaining socialistic change. This vast army of government employees will be a factor of great significance in all fields of socialistic legislation in this coming decade.

Storm centers of current medical discussion are the Forand, Morse and similar legislative bills. By 1965, approximately one-sixth of the adult population of the United States will be over 65 years of age. In recognition of the effect of inflation upon medical costs and inversely upon the value of accumulated savings, herein exists a veritable army of voters likely to demand medical care as an aspect of "cradle to grave" security. It is a cruelty of inflation that their demands become more urgent as their capacities become less, and the humanitarian need more certain to require nation-wide action. Medicine gropes for a constructive policy to shape the need within the framework of independent practice, yet it hesitates to recognize it must take the initiative in finding an answer lest it be swept aside in all-enveloping legislation!

Third-party medicine

A perennial problem of private practice is the growth of third-party medicine arising from labor-union initiative. With persuasive forces of public opinion recognizing wage demands to be a cause of inflation, labor unions will now emphasize efforts on less repugnant benefits, among which will be those in the field of medical care. The pressure here will be intensified. The solution will not be easy, for both labor and management, each with cost factors at stake, will join forces against a less experienced, less organized medical body.

How then, within the fabric of coming social change, can there be established a satisfactory position for independent medicine? Part must come from realistic compromise, part from bold, progressive initiative, and part from astute public relations to identify private medicine with the traditional factors that made America great. It is better to recognize the need for federal intervention in meeting the financial needs of old-age assistance and help to shape the program than to oppose and be swept aside by all-engulfing legislation.

Medicine in social field

A radical departure from the past concept of public relations may be needed. It would seem an effort must be made to disassociate medicine in the public mind from its current placement in the field of social welfare. Medicine, as now defined by the public, is a social field, inextricably tied in thought to concepts of public welfare. As long as it is so defined in the public mind it will be swept along the fast-flowing tide of welfare and security socialization. It will be much better for all engaged in medicine to be disassociated from this social concept of

medicine as a humanitarian art, and be identified with the field of small business and private enterprise. It is simply a matter of shifting emphasis in public relations. The latter is a safer and more sophisticated approach and has done much to assure the integrity of private enterprise in insurance, banking and public utilities. It must be remembered that control of the individual is anathema to the American way of life, but the Law of Eminent Domain holds when the public welfare is at stake.

Keep government small

The public respects the tradition of small private business for it is familiar with its problems and has confidence in its operation. "Rights of the small business man," "American tradition of private enterprise," "cost efficiency of competition," "need to keep government small," etc., are not just hackneyed phrases—they are building blocks of good public relations.

Does all this mean the A.M.A. must go underground? No, but it must operate with less public fanfare and stop identifying American Medicine as a unit. Let its public relations define the doctor as an individual business man confronted with all the human problems of making a living, and worrying, like all business men, about *his* own lack of security. It needs to identify itself with and publicly proclaim *his* economic problems. It needs to individualize medicine as a small business enterprise and not as a giant monopolistic oligarchy. By all means the A.M.A. should keep a close eye on legislation at both national and state level and wisely have prepared constructive direction. But let it operate in opposing or favoring legislation, or better yet in initiating legislation, not as the A.M.A., but through its very grass-roots, the county medical societies.

Doctor activity

The point cannot be too strongly stressed that while the organizational framework exists for "grass-roots" effort, the administration of it has seldom been effective. The fault lies at every level. The national offices of the A.M.A. have not yet well identified themselves with the individual doctor. This lack of rapport is now being realized and the proposed recommendations set out at the beginning of this article are in recognition of it. A strengthening of the lines of communication to the individual doctor is a healthy innovation. In its essence, however, it is the county society that represents the "political ward." Here it is that the political "feel" of the socio-medical climate must be gauged and work done to assure individual doctor-member activity in affecting legislation and public relations.

The efforts of national body and county society can be well coordinated. As an instance, the Keogh Bill hangs in the delicate balance of rejection or acceptance. Yet on all sides is heard doctor comment tinged with indifference or defeatism. Aside from the monetary benefits badly needed and properly deserved, the bill hastens to identify medicine with small business and private enterprise and hence increases the complexity of later socializing medicine. The A.M.A. fails when it does not bring home the significance of this measure to the doctors of America, but the doctors also fail where they could succeed by not acting as individual and vocal champions of this bill's provisions. In a similar vein, it seems poor politics for medicine to preserve its "individualism" and its unit target appearance, by remaining out of social security. It is bad economics, too, for every item, every service purchased by the doctor is tagged with the cost of someone else's social security tax.

Economic and social status

This article has with purpose spoken of medicine in materialistic terms. There are many honorable obligations of a medical career. One, to be sure, is to further the excellence of medical practice. But there are others: to assure for ourselves a proper economic and social status for the coming years, and for the future generation of doctors a similar status. In the long run, one cannot be had without the other, for as surely as medical economics deteriorate so will medical excellence. It now remains to be seen how effective in practice will be the recommendations of the House of Delegates relating to recognition of the socio-economics of medicine. It is a good start in a field long needing of recognition. •

Tuberculosis is still a problem*

Leroy Elrick, M.D., Denver

T. B. or not T. B. The question is a frightening one when you read this grim account of a recent one-man silent epidemic. Moral: Don't lower your guard against the tubercle bacillus!

In 1956 a boy one year and nine months old became ill with cough and fever and was hospitalized. Active primary tuberculosis of the lungs was found. In searching for the source of this child's infection, a distant relative, a young man 23 years old, was found to have far advanced active pulmonary tuberculosis with cavitation and positive sputum. His mother had died of tuberculosis in 1946. He had served as a baby-sitter to the baby while the child's mother was in a hospital. He had had some cough for about a year and during this time had lost 10 pounds in weight, but had not sought any medical care and was not aware of having tuberculosis. On discovery of the disease he was hospitalized for treatment. This patient, an unemployed construction worker, had an unusually large number of contacts, consisting of relatives and neighbors.

Contacts

Twenty-nine of these contacts were examined in the Tuberculosis Clinic of the Disease Control and Adult Health Service, Denver Department of Health and Hospitals. Twenty-three of them were children under the age of 14 years, and most of these were under the age of 5 years.

Tuberculin tests, using intradermal old tuberculin, were done on all of the 23 children, and positive tests were found in 14, or 60 per cent of them. In the general population, a group of children of similar age would probably show less than 5 per cent of positive reactors.

Six adult contacts were examined. These were all young adults, ranging in age from 23 to 31 years. Five of them were tested with tuberculin and all were positive.

Active cases

All of the contacts also were given chest x-rays. One of the adults, a woman 31 years old, showed x-ray evidence of moderately advanced active tuberculosis, but refused to accept the diagnosis until sputum cultures became positive several months later. She was then hospitalized. Seven of the children, in addition to the index case, have received a diagnosis of active primary tuberculosis and have been placed under treatment by the pediatricians connected with the tuberculosis clinic. These cases of active primary tuberculosis showed some abnormal x-ray findings in addition to the positive tuberculin test. It is, of course, unknown at this time how many of these children who reacted positively to the tuberculin test will develop progressive primary disease or active reinfection type of tuberculosis at some future time, but this can happen at any time during their lives. In addition, an unknown number of unlocated persons who were in contact with the young man have been similarly placed in danger.

Moral

This case is reported as an illustration of the number of people who can be infected from one active case of tuberculosis, and to

*From the Tuberculosis Clinic of the Disease Control and Adult Health Service, Department of Health and Hospitals, Denver. The writer wishes to acknowledge the assistance of Mrs. Mildred Coder, R.N., in compiling data contained in this report.

emphasize the fact that tuberculosis is a continuing problem. It is unfortunate that public and professional opinion seems to have come to a position where tuberculosis is no longer considered a serious problem. This cluster of cases is a reminder that one infected individual may start a chain of infection resulting in major damage to many others. Assuming, as seems probable, that the infected children all received their infection from the original case, it is apparent that one undiscovered and untreated case spread his infection to at least 15 children (including the index case) and several adults. As a result of this, the lives of these children and adults have been placed in jeopardy; they will have to remain under observation for many years and the end results may be of serious consequence to the individuals and to the community.

Again we are reminded of the importance of early detection of tuberculosis and prompt investigation of persons in contact with the discovered cases. •

Aggravation of epilepsy by reserpine

associated with possible bleeding and clotting disturbances

Philip D. Pallister, M.D.,* Boulder, Montana

An increase in the number of seizures may occur in certain epileptics when on reserpine therapy. Potentially dangerous changes in the blood clotting mechanism may also occur.

THE USE OF RESERPINE in treating behavior problems is widely prevalent in mental institutions and schools for the mentally defective. In our institution reserpine (Serpasil) has been used in small doses of 0.1 mgm. three times a day for behavior control with some success. Although we are no longer using this drug in great quantities, we are prescribing it throughout the institution, particularly in the lower grade agitated patients.

Several authors, namely, Lambros[1], Zimmerman and Burgemeister[2] and Carter[3] have reported some improvement in control of epileptic seizures when reserpine was added to the previous anti-convulsant medications. In particular, Lambros reported no change in seizure patterns in 67 of 100 patients. In my own experience, while testing the use of reserpine in behavior problems and dealing with a limited number of epileptic patients, no seizures occurred in six epileptic patients who were on medication for one year. They had had a total of eight grand mal seizures in the prior year[4]. On the other hand, Barsa and Kline felt that reserpine might cause an increased number of seizures in epileptics[5]. Because our series and experience was in a limited number of epileptics and because the reports in the literature in most cases did not include large numbers in the study of this problem, we embarked two years ago upon a study of the use of reserpine in epileptics with grand mal seizures.

Mode of action

The historic background of Rauwolfia serpentina and its use in the crude form in India for a number of centuries for a sedative effect, for the relief of snakebite and for various anxiety and gastrointestinal conditions are well known. There have been a large number of alkaloids isolated from Rauwolfia serpentina and attention has centered

*Clinical Director, Montana State Training School, Boulder, Montana.

upon the use of reserpine since it has far greater central depressant action than the other fractions, but less demonstrable immediate peripheral reaction. It is generally agreed that the central actions of reserpine are of greater importance than the vasodilator action. These central actions are similar to the known actions of the hypothalamus. The drug apparently acts by suppressing the posterior hypothalamus and its effect extends anteriorly as far as the ventromedial nucleus causing increase in body weight, and posteriorly to the reticular formation causing drowsiness and diminished alertness[6]. These actions of reserpine in the hypothalamic areas may possibly be related to the release of serotonin from the hypothalamic cells. Serotonin has an indol nucleus as do reserpine and enteramine (contained in the argentaffin cells of the stomach) and it disappears from the cells of smooth muscles, thrombocytes and the hypothalamus when reserpine is administered. Waste products of serotonin then appear subsequently in the urine[7, 8, 9]. It has been reported to be anti-diuretic, possibly by action on the posterior pituitary gland[10]. In addition to the effects mediated through the sympathetic nervous system, there is also a direct peripheral vasodilating effect[11] and a peripheral diuretic effect brought about by hyperfunction of the glomeruli, hypofunction of the tubules and increased plasma and blood flow through the kidney[12].

Clinical effects

It is agreed that reserpine affects most patients in direct proportion to the amount of drug administered and that it produces hypotension, reduction of the vascular resistance, bradycardia, lowered body temperature, increase in body weight, lethargy and tranquillity (sedative effect). Colombati has demonstrated that during electroencephalograph studies, reserpine may cause insomnia as well as prolonged sleep. He reported a depression of the bio-electric rhythms occurring during the clinical torpor produced by intravenous administration of the drug[13]. However, Dennison and his co-workers reported that there was no change in the EEG patterns[14]. Various other clinical effects have been reported. Of considerable interest is the report that prothrombin time is prolonged as well as clotting time in the presence of a normal platelet count and bleeding time[15]. Increased volume and amount of free acid in gastric secretion has also been reported by a number of authors. Reserpine's effect upon behavior has been well documented, as well as its use in the mentally ill and psychotics. However, Barsa and Kline's report stated that it was more effective in psychotics without convulsions than in those with convulsions, as mentioned previously.

Toxic or side effects of the drug

The most common side effects reported are nasal stuffiness and headache, decreased initiative and fatigue, weight gain, drowsiness, insomnia, nightmares, nausea, vomiting, diarrhea, dizziness and irritability. Paralysis agitans has been reported a number of times. Edema secondary to sodium retention has been reported, but this side effect has been adequately controlled by diuretics. Ventricular premature contractions, hypotensive shock reactions, angina pectoris in persons with cardiac disease, depression anxiety states and suicidal tendencies and miosis have all been reported. More recently reports of hemorrhage from duodenal ulcer have been creeping into the literature. Melena associated with hyperchlorhydria induced by reserpine has been reported. Hyperchlorhydria may result from peripheral action on gastric secretions or action on the parasympathetic ganglions or possibly from a humoral mechanism. It has been pointed out that this effect of the drug is not counteracted by the anti-cholinergic drugs. Hollister, in February, 1957, reported in the Archives of Internal Medicine hematemesis associated with melena in four patients, three of these mentally ill and one hypertensive. Only one of the four had an ulcer and it apparently was not activated at the time of the hemorrhage. He discussed the increased volume and acidity of gastric secretion, increased motility of the lower gastrointestinal tract and an emetic effect of reserpine. It has been theorized that this cholinergic-like action might exacerbate a duodenal ulcer causing hemorrhage. However, since reserpine increases the excretion of the serotonin metabolite, a possibility must be considered that some qualitative changes in blood platelets or capillary integrity may

occur due to serotonin depletion and result in hemorrhage[8].

It may also be suggested that loss in serotonin from smooth muscle cells might cause disturbances of vascular smooth muscle action leading to loss of capillary integrity and pooling of blood. Hollister tested a large number of patients receiving reserpine and felt that there was no change in the blood clotting, clot retraction or prothrombin time. However, in two patients out of 68 tested, a positive capillary fragility test was obtained. An increase in capillary fragility was equivocal in 10 additional patients. Bleeding and clotting times were normal in all 12 patients. Hollister felt that the hematemesis and melena were due to local changes in the gastrointestinal mucosa rather than a disorder of blood coagulation. He felt that there was no evidence that this drug caused a disorder of blood clotting. Two cases of gastrointestinal hemorrhage as a complication of reserpine administration have been reported by Dillon and Swain in the November, 1956, issue of the American Journal of Psychiatry, and reports of similar hemorrhages may be found in the literature.

This hemorrhagic effect becomes most interesting since a failure of the blood to clot and a lengthened prothrombin time in a patient receiving the drug has been reported, as well as inhibition of in vitro clotting by the addition of reserpine[15]. Furthermore, recent reports of thrombopenia associated with reserpine therapy have been published.

Method of study

On April 1, 1956, 74 epileptics with grand mal seizure patterns were started on Serpasil which in one month was raised by small increments to 1.0 mgm three times daily of Elixir of Serpasil*. All grand mal seizures are routinely recorded in our institution; therefore, the number of grand mal seizures for the 12 months prior to drug therapy were easily tabulated. Seizures were also, of course, tabulated during the study and for the subsequent 12 months. The number of seizures during the year before and the year after drug therapy were used to establish the usual frequency of seizures. During the entire three years of the study, there were no changes in anti-convulsant medication in this group of 74 patients. As usual, patients with seizures out of control were admitted to the hospital for sodium phenobarbital or pentothal anesthesia. Four patients with epileptic seizures died while receiving reserpine. Four patients were transferred to the state hospital at Warm Springs for mental reactions during reserpine therapy. Accordingly, a total of 66 patients with grand mal seizures were studied for three years for frequency of seizures. Personnel routinely administered the drug to each of the epileptics with his usual anticonvulsant medication. Three mgm. daily was decided upon since this is the average dosage of Elixir of Serpasil which has been used in many institutions.

Results

These 66 patients had 1,319 seizures the year prior to the study. During the year on reserpine they had 1,852 grand mal seizures which is an increase of 40 per cent. In the following year they had 1,605 grand mal seizures, still a slight increase over the year prior to the study. The group was classified by seizure types to ascertain if any type was affected more than another by the use of reserpine (Table 1).

TABLE 1

No. of Patients	Type of Seizures	Grand Mal Seizures 1955-56	1956-57	1957-58
49	Grand Mal	678	685	630
17	Grand & Petit Mal	641	1167	975
66	Total	1,319	1,852	1,605

There were 49 patients who had only grand mal seizures as evidenced by clinical findings and the electroencephalogram. These 49 patients had 678 seizures prior to the year of the study, 685 grand mal seizures during the study and 630 after the study, or no significant change. The 17 patients who had both grand mal and petit mal seizures had 641 major convulsions in the first year, but 1,167 seizures during the year on reserpine, an increase of 82 per cent. The year after Serpa-

*Furnished in large part for this study by Ciba Pharmaceutical Company.

sil was used there were 975 major seizures in this group, still a considerable increase over that of the year prior to the study. The 66 epileptics were then classified by etiology (Table 2).

TABLE 2

No. of Patients	Etiology of Epilepsy	1955-56	1956-57	1957-58
19	Trauma	201	247	208
12	Infection	158	330	147
13	Familial-Congenital	206	253	143
8	Multiple (two or more)	184	468	492
14	Unknown	570	554	615
66	Total	1,319	1,852	1,605

There were 19 patients whose epilepsy was post-traumatic. These patients had 201 seizures the year prior to the study, 247 while reserpine was being used, and 208 after the use of reserpine. This is an increase of 23 per cent and is perhaps not significant.

Twelve patients whose epilepsy was post-infectious, had 158 seizures the first year of the study, 330 while reserpine was being used, and 147 the following year, or an increase of 109 per cent while on reserpine.

Thirteen patients, whose epilepsy resulted from familial, hereditary, or congenital causes, had 206 seizures the first year, 253 while reserpine was being used, and 143 seizures during the last year. The increase of 22 per cent while on reserpine may not be significant.

Eight patients had two or more of the above causes for their epilepsy. These patients had 184 seizures the first year, 468 during the year of the study, and 492 the following year. This is an increase of 154 per cent while on reserpine. However, one of these patients had an increase from 148 seizures to 416 seizures, and during the past year he had 413. His condition is rapidly deteriorating and I am unable to state what actual effect the reserpine had upon this patient's seizure record. The cause of the epilepsy in 14 of the patients has not been determined. They had 570 seizures the year prior to the study, 554 during the study, and 615 during the last year, or no apparent disturbance in seizure frequency. The 66 patients were then classified by the seizure patterns present on the electroencephalogram (Table 3).

TABLE 3

No. of Patients	EEG Pattern	Grand Mal Seizures 1955-56	1956-57	1957-58
30	Grand Mal Spikes	481	516	452
	15–Severe changes	198	198	172
	5–Mild changes	0	20	0
	10–Focal Spikes	283	298	280
15	Grand and Petit Mal	601	1,147	954
	4–Grand and Petit Mal—general	80	86	75
	8–Grand and Focal P.M.	424	851	774
	3–Grand and Focal P.M.V.	97	210	105
2	Petit Mal only	40	20	21
14	Suppressed Cortex	192	166	160
	8–General Suppression	71	39	69
	6–Unilateral Suppression	121	127	91
5	Normal EEG	5	3	18
66	Total	1,319	1,852	1,605

Thirty patients had only grand mal type spikes on the electroencephalogram. These patients had 481 seizures the year prior to the study, 516 during the study, and 452 after the study, or no significant change in seizure pattern. These 30 were subdivided into severe electrical disturbances, mild electrical disturbances, and focal disturbances. No significant change was noticed. Fifteen patients who had both grand mal and petit mal type seizure patterns had 601 seizures before the study, 1,147 seizures during the study, and 954 after the study. These were broken down into three different groups. Four patients who had grand mal and rhythmic petit mal disturbances in all areas had no significant increase in seizures. However, the two subgroups (11 patients) with grand mal spikes as well as focal petit mal and focal petit mal variant disturbances in the temporal lobes had increase in seizures from 521 to 1,061 and then down to 879.

Two patients who had grand mal seizures

clinically, demonstrated only petit mal patterns in the electroencephalogram. These patients had 40 seizures before the study, 20 during the study, and 21 the last year. Fourteen patients who had suppressed cortical electrical activity had 192 seizures the first year, 166 seizures while on reserpine and 160 during the last year. Six of these patients had a suppressed unilateral hemisphere, the remaining had general suppression and there was no significant difference. Five of the patients had normal electroencephalographic patterns. These patients had five seizures the first year, three the following year and 18 the last year.

Comments

When these patients are considered it appears significant that those patients who had both grand and petit mal (clinically and electroencephalographically) had a marked increase in the number of grand mal seizures while they received reserpine; while those with grand mal only had no significant change in seizure frequency. It seems apparent that reserpine frequently triggered seizures in those patients with both grand and petit mal.

It is perhaps true that reserpine may be used safely in those patients demonstrating only grand mal seizures. Some of these patients do have hypertension and behavior problems which can be controlled by reserpine.

Of interest during this study were the four deaths that occurred. During the year that we used reserpine to study its effect in small doses on behavior and intelligence there were no deaths in the group receiving the drug; however, the dosage used at that time was 0.1 mgm. three times daily.

CASE REPORTS

One of these patients, W. R., a white male, was admitted to our institution on October 17, 1954, at the age of 16 years. His epilepsy was caused by birth injury. During the year prior to the study, W. H. had 76 major convulsions. He was started on reserpine on April 1, 1956, and during the succeeding three months he had 29 major convulsions. He was then released from the institution for a summer vacation with his relatives and reserpine was continued at home. Two months after this, W. R. had a series of grand mal seizures for 12 days and died in status epilepticus. Postmortem examination revealed that this patient died with a ruptured appendix.

The second death was a 16-year-old white male, J. Y. This patient had 17 major convulsions the year before the study and five during the first five months while on Serpasil. He was born with an imperforate anus, a megacolon and an enlarged liver. His epilepsy was probably congenital in nature. On the morning of his death he had a major convulsion which appeared to be of average intensity for this patient. As usual, attendants in the cottage placed him upon the floor so he would not be injured by recurrent seizures. Checking him a short time after a second seizure in the afternoon they discovered that he was dead. On postmortem examination both lungs showed decreased crepitation throughout and the left lower lobe was completely consolidated. Most of the right lower lobe was consolidated. Surfaces of both lungs showed irregular reddish-purple blotchings varying in diameter from 5 to 20 mm. Bronchi contained a small amount of mucoid material. Grossly this appeared to be a bilateral bronchopneumonia. However, microscopic examination demonstrated that the alveoli of the lungs were filled with blood and coagulated serum. Little inflammatory reaction was found and "on microscopic section this bronchopneumonia was found to be hemorrhage and hemorrhagic congestion the cause of which is not clear from organic, pathologic findings."

The third death occurred in a white male, aged 35. This patient was in the hospital for a period of 15 days. He had been treated during this time for findings suggestive of pneumonia and pulmonary embolus. During this period he had one major convulsion just before death. The cause of his epilepsy was hydrocephalus, external in nature, thought to be from hemorrhage in infancy. During the year prior to the study this patient had 70 major convulsions and 18 in the five months while on Serpasil prior to his death. Postmortem findings were confined to lungs, vascular system, brain and skull. The cause of hydrocephalus was an old fracture on the left side of the skull evidenced by callous formation, with a contre coup injury to the right side of the cranial cavity. There was a phlebothrombosis of the right iliac vein, pulmonary emboli bilaterally, mural thrombosis of the right ventricle, gynecomastia and a cavernous hemangioma of the liver.

The fourth patient, D. A., died at the age of 17 years. This white male had six seizures the year prior to the study and no seizures in four months while on Serpasil. He had a moderate hydrocephalus believed to be due to birth injury. The patient had been hospitalized from January 21 to January 23, 1957, for mild fever with slight swelling of the left leg which was apparent on the second day of his hospitalization. On January 28, he arose, walked to the bathroom, collapsed and died. Postmortem examination verified the moderate hydrocephalus. Chronic fibrous arachnoiditis of the anterior portion of the brain was also

present. The most interesting findings were in the lung and vascular system. In the left pulmonary artery there was a large embolus and pulmonary infarct. The origin of this embolus was probably phlebothrombosis of the left leg.

In both of the patients who died with pulmonary embolism and infarction there was no evidence or history of injury to or infection in the legs; the etiology of the thrombosis is therefore not known. The etiology of the pulmonary hemorrhage which occurred in the other patient is also unknown.

An interesting speculation is that reserpine in some way disturbs the clotting and bleeding mechanisms of the body. It has been suggested at times by other authors that there is a quantitative and qualitative change in the platelets themselves. A disturbance of clotting time and increased prothrombin time by the use of reserpine in blood in vitro has been claimed. There is evidence that capillary fragility is increased. Evidence has also accumulated that gastric hemorrhage, not necessarily related to ulcers, may result from use of reserpine and it has been postulated that this is either a direct or humoral effect upon the gastric mucosa. I have found no reports that clot formation is increased by the use of reserpine.

The circumscribed and localized areas of free pulmonary hemorrhages in one of our patients have been related to the use of reserpine, possibly as the result of a disturbance in the bleeding and clotting mechanism or from a disturbance of capillary integrity. It is probable that the phlebothrombosis, mural thrombosis, pulmonary emboli and infarctions which occurred in the other two deaths were not related to reserpine. However, any possible disturbance of the bleeding and clotting mechanism by reserpine should be carefully investigated, since peripheral vasodilation and capillary fragility are reported and pooling and stagnation of the blood and small localized capillary hemorrhages resulting therefrom might lead to thrombus formation.

Although four patients were transferred to the State Hospital at Warm Springs during the year when reserpine was being administered, it does not appear that reserpine was the etiologic factor in the mental reactions which occurred.

Summary

It has been demonstrated that 1.0 mgm. of Elixir of Serpasil three times daily does not apparently affect grand mal seizures in those persons who have grand mal only. However, if either trauma or infection has caused the epilepsy, or if there were multiple causes of the epilepsy, or if the patient is afflicted by grand mal and petit mal both, it appears that there is a significant increase in the number of grand mal seizures. The mechanism of this effect is not known and apparently should be studied at greater length. It has been postulated that reserpine in one instance in this series has caused pulmonary hemorrhage resulting in death. It has also been suggested that two fatally terminating cases of embolic thrombosis might be related to the use of reserpine. •

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Emergencies in the newborn*

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These cases represent neonatal emergencies as actually observed in a medical teaching program. Read the first portion of the paper, jotting down your presumptive diagnosis for each case. Afterward, turn to the discussion of how these cases were handled by clinicians of the Tulane Medical School.

RECOGNITION OF THE NATURE AND CAUSES for a variety of disturbances in young infants may tax, vex, or escape even the most experienced and astute diagnostician. Despite remarkable technical advances that have been made to help clarify diagnoses or expedite therapy, the major burden for recognizing when and how to employ these aids remains with the clinician at the cribside.

Our purpose here is to review and emphasize a number of purely clinical features by which a variety of neonatal emergencies were suspected, then to append later the results of pertinent supportive diagnostic or therapeutic efforts. The protocols chosen have been admittedly abbreviated in order to emphasize the essence of provocative diagnostic "leads", but all are factual reports and include those clues available and necessary for strong presumptive diagnoses. We hope the dignity of practicing physicians will permit the same study and speculation we expect from medical students or house officers when confronted by these same problems!

The variety of these factual examples falls far short of illustrating the total spectrum of disease patterns one encounters among newborns, but emphasizes the importance of prompt and proper recognition if we are to reduce further the prevailing neonatal morbidity and mortality rates. Some of our illustrations are admittedly rare in any single physician's experience, but each was extraordinarily common — to the infants and physicians concerned. Once a correct diagnosis is *suspected*, practically any good standard text will guide the student or clinician to proper, confirmatory diagnostic procedures or definitive therapy.

First, the problems

1. This infant was delivered by breech four weeks before expected date. He weighed 2,170 grams, cried lustily, and seemed normal in all respects. Within an hour after admission to the nursery, he was found to be pale, and had a pitifully weak cry; the abdomen was tightly distended and dull to percussion. He appeared *in extremis*.

2. Delivered spontaneously at term, after an uneventful pregnancy, this infant seemed to require considerable stimulation before she took her first breath after about five minutes. Thereafter, respirations were rapid, apparently difficult, with conspicuous retractions, an open mouth, increasingly frequent bouts of cyanosis unchanged in oxygen, progressive lethargy—until the diagnosis was made at 20 hours.

3. Everything concerning the pregnancy and delivery of this infant seemed orderly and the infant appeared entirely normal both in the Delivery Unit and after routine examination in the Nursery. Less than two hours later, an alert nurse called the intern's attention to the presence of some frothy mucus about the baby's mouth and nose—he found

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nothing else unusual in the infant's general appearance or behavior.

4. About eight hours after delivery, this infant vomited a small amount of greenish mucoid material when the first attempt at offering water by nipple was made. Called promptly to the attention of the house officer, his examination disclosed that the infant had suggestive mongoloid features and that the upper abdomen seemed distended; on a smear made from the center of a meconium mass which followed a rectal examination, he could find no lanugo hairs or epithelial cells.

5. The resident was called to see this infant at the age of four hours because the nurse had noted that her respirations were grunting in character and her abdomen seemed big. He found just that—obvious respiratory distress, apparently related to a distended, tympanitic abdomen. Gastric lavage yielded only a little mucus and air, accomplished no relief. Provided with the further information that an older sibling had died after "progressive pneumonia" at the age of four months, he made a presumptive diagnosis—which he promptly confirmed.

6. Born by Caesarean Section because of a persistent transverse lie and a trial of labor, this infant did not breathe, though the heart tones seemed good. Aspiration of a few cc. of gastric contents accomplished no apparent benefit. The anesthesiologist in attendance then passed a tracheal catheter and gave positive-pressure oxygen with a bag for 45 minutes—when the heart stopped.

7. This mother had pre-eclampsia but delivered her male infant spontaneously from the L.O.A. position near term after a labor lasting 11 hours; early bleeding during labor was attributed to a marginal placenta praevia. In the delivery room, the infant was judged to be normal in all respects. At 32 hours, the baby suddenly developed shallow irregular respirations, the anterior fontanel was noticeably prominent, and the color was poor. Peripheral blood contained 9 grams of hemoglobin, and prompt subdural taps were negative. Then, careful lumbar tap yielded grossly bloody fluid, at an opening pressure of 200 mm.; about half the red blood cells in this fluid, examined immediately, were crenated —and the supernatant was deeply xanthochromic.

8. This 6½-pound term infant was referred to us from a rural hospital at 11 hours, after all efforts to stop a continuous bloody ooze from the umbilical cord had failed. The pregnancy had been uneventful and the delivery spontaneous at term. Oozing started probably during the first two hours, and it was estimated that the baby had lost more than 100 cc. of blood.

On arrival, the infant was in profound hypotensive shock, cold and cyanotic; umbilical dressings were saturated with fresh, unclotted blood and the hemoglobin level was 7 grams. There was also blood oozing from a number of earlier venapunctures. The blood did not clot and the platelets appeared normal. Despite prompt administration of compatible blood, dextrans, fibrinogen, and protamine sulfate, bleeding continued and the infant expired three hours later.

9. Two Negro infants, successive term products of apparently normal seventh and eighth pregnancies, followed essentially similar neonatal courses—in both, obvious jaundice and splenomegaly were first noted at about 12 hours of age.

Adequate studies reasonably excluded blood group incompatibilities, regular and irregular blocking antibodies, sickling, syphilis, and sepsis. At the time symptoms were first noted, hemoglobins were about 13 gms., bilirubins 20-25 mgm. (mostly indirect). The babies had responded only transiently to adequate exchange transfusions. These were then followed in both cases by repeated small direct transfusions, and by the age of 4-5 weeks, the initial features were still conspicuous—splenomegaly and anemia; by 10 weeks the hemoglobins were around 4 gms., reticulocytes around 7 per cent.

10. Immediately after delivery, obvious stridor, sternal retractions and slight cyanosis were noted in this eight-pound male infant; pregnancy and delivery had been "routine." The nares were patent. Stridor became worse, though cyanosis was relieved with oxygen. In oxygen, retractions were not effected, but actually seemed more conspicuous. The lungs were hyper-resonant, with inspiratory and expiratory wheezing, and an x-ray of the chest showed nothing unusual, A catheter was passed easily through the esophagus, and

gastric lavage yielded only a small amount of mucus.

11. This male breast-fed infant had been judged normal in all respects and was discharged with his mother on the third day after delivery. At home, on the fifth day, he seemed lethargic, was noticeably jaundiced, refused feedings, vomited small amounts of clear mucus several times, and had three small liquid greenish stools — so he was brought back to the hospital.

Jaundice was obvious and the abdomen was distended and tympanitic. The infant was seriously sick and had several brief apneic periods during a hasty preliminary examination. An upright film of the chest and abdomen was made *en route* to the ward.

12. This seven-pound male infant was normal at birth. At 18 hours, he vomited bile-stained fluid, retched a great deal, and the abdomen was found to be distended and dull to percussion. Two small meconium stools had been passed; lanugo hairs and epithelial cells were present. An upright film of the abdomen showed only scattered small bowel gas patterns, with fluid levels. Abdominal paracentesis yielded a small amount of viscid, dark, bloody fluid. A single gentle attempt at barium enema was technically unsatisfactory.

13. The mother of this infant had had an acute upper respiratory infection with fever for three days; then—following a labor of 57 hours, and 22 hours after rupture of the membranes — she delivered an eight-pound female infant by Caesarian Section, indicated because of cephalopelvic disproportion. In the delivery room, the infant was judged to be normal, robust and active. Within an hour, respiratory and cardiac distress was noted. The pulse was fast and irregular, heart tones were poor, retractions increased and tachypnea progressed; a few scattered rales were heard.

14. Born at another hospital, details of the delivery were unknown, but reported as entirely normal by the parents. The infant had done well for 10 days, when he developed anorexia, vomiting, and pallor with increasingly severe bouts of cyanosis at any disturbance. He was brought to us at 14 days, when he appeared seriously ill, temperature 105°. Respiratory distress was conspicuous, with coarse rales over both lung fields, hepatosplenomegaly, gallop rhythm, and a harsh systolic murmur heard over the entire precordium. The PMI could not be defined. A few petechiae were soon found in the skin and conjunctivae. The chest film showed features compatible with pulmonary congestion or pneumonitis, ECG showed large complexes with a left axis deviation, and the hemoglobin was 12 gm. The leucocyte count was 36,000, with a shift to the left.

15. The pregnancy which yielded this infant had been considered uneventful, except that the mother had had a few scattered pustular skin lesions which were not called to medical attention, and which had cleared completely several weeks before delivery. The infant seemed normal until the ninth day. At that time, jaundice was noted along with a small red pimple near the tip of the nose. On the eleventh day, the baby's urine was red. The family physician saw the infant for the first time and referred him directly for study. On admission, the baby appeared moribund, deeply icteric and dehydrated; the liver and spleen were both enlarged, respirations were shallow and irregular, and the right kidney was easily felt to be large and firm. Hemoglobin—14 gms., WBC 53,000; urinalysis: albumin 4 plus, RBC 15-20/hpf, WBC 15-20/hpf, Sp.gr. 1.014; CO_2 4.5mMol/L, Cl 133 mEq/L; cultures from the blood and urine were made.

16. Jimmy, a first-born male, weighed nine pounds at birth and did well on a standard formula until the age of 2½ weeks. Then, for no apparent reason, he began to retch and vomit, had several loose stools, and rapidly became listless and dehydrated. He was hospitalized elsewhere for two days, given antibiotics and fluids. He recovered rapidly. Four days later, at home, there was recurrence of all symptoms, and this time it was noted that he seemed to urinate more frequently than before. He was then referred to us, weighing one pound under birth weight. He was shocky, pale and dehydrated. Temperature 99°, pulse weak at about 160, respirations 22/min. Blood pressure 40/? The urine contained a trace of sugar; pH 7.5—otherwise normal by routine examination. Hemoglobin 9.0 gms., WBC 18,500, blood sugar 122 mg., BUN 27 mg., CO_2 15, chlorides 86.4, sodium 121, potassium 6.7

mEq/liter. X-rays of the skull, long bones, chest and abdomen were not remarkable. Chromosomal sex was male.

17. This baby girl was born at term of a multiparous mother; delivery was uneventful, with low forceps and episiotomy, from the L.O.A. position. Demerol and scopolomine had been given for analgesia, and ethylene and ether had been employed briefly. When there was some difficulty with respirations following delivery, Nalline® and incubator care were given. The color was mottled, respirations were 4-6 per minute and irregular, heart sounds were distant over the left precordium but loud and regular at a rate of 155 over the right nipple. No breath sounds were heard over the left chest and only faint and irregular ones in the right axilla. There were no abdominal masses and the liver and spleen could not be palpated. The infant expired at one hour, as an x-ray was being made to confirm the presumptive clinical diagnosis.

18. Under cyclopropane and ether anesthesia, the second of twins was delivered by version and extraction 32 minutes after her normal sibling; the mother had had mild pre-eclampsia. The infant weighed four pounds, and was apneic. With tracheal suction, respirations were initiated and maintained for about one minute. The heart was regular at 160. Irregular but frequent bouts of apnea led to repeated efforts at positive pressure respiration with oxygen through a tracheal catheter. Apnea increased in frequency and duration, cyanosis progressed, heart sounds weakened, and when an attempt was made to give intracardiac adrenalin, the barrel of the syringe was forced out by air.

19. The mother of this first-born infant had mild pre-eclampsia, for which she had received phenobarbital and Reserpine. A normal delivery occurred two weeks before expected date, and the infant seemed normal. About five hours after delivery, the nursery supervisor noted that the baby was extremely lethargic, responded only sluggishly to stimuli, had shallow, slow and irregular respirations, and slight cyanosis. The nose seemed stuffy, but there was no obstruction to the passage of a nasal catheter.

20. Jaundice was first noted in this infant about six hours after an uneventful delivery. Examination disclosed conspicuous hepatosplenomegaly, a few scattered petechiae, temperature 99, pulse 160, respirations 48/min., hemoglobin 17, bilirubin 6.4—mostly indirect. Prompt study failed to establish any blood group incompatibility, blood cultures were drawn, and sediment in a catheterized urine specimen showed only a few normal epithelial cells. As the hemoglobin fell and the bilirubin rose, the infant's condition progressively worsened while antibiotics were being administered. The downhill course was not appreciably affected by exchange transfusion. X-rays of the skull showed bilateral hazy but suggestive calcific shadows corresponding roughly to the contour of the lateral ventricles.

And now the answers

So much for the preliminary clues. After speculating over these, it might be academically healthy to venture the "most likely" presumptive diagnoses together with the appropriate confirmatory observation or procedure which might lead to adequate therapy. Obviously, not all these babies could be saved, though for some, results were most gratifying. We all make mistakes, but hope to learn something from them! Now, continue with the "follow-ups"; what was done, what happened, what was found—the reader might wish to compare these with his own speculations! The number of each case corresponds to the number of the "answer" and to a pertinent reference at the end.

1. Most *subcapsular hematomas of the liver* occur in infants born by the breech. This, together with extreme pallor, but no evidence of hemolysis or external blood loss, should suggest that the cause for the distended dull abdomen was rupture of such a hematoma. The diagnosis was supported by prompt paracentesis yielding fresh blood, and therapy consisted of rapid replacement of blood, with suture of the torn liver[1].

2. Catheterization of the nares confirmed the clinical suspicion of *choanal atresia*. Under endotracheal anesthesia, the bony choanae were punctured through the nose and the airway was maintained with polyethylene catheters. An additional diagnostic maneuver consisted in the introduction of lipiodol into the nares and a lateral roentgenogram[2].

3. Frothy mucus alone should immediately suggest *esophageal atresia with tracheoesophageal fistula*. This was promptly confirmed by encountering obstruction to passage of an esophageal catheter, then introduction of a few drops of lipiodol to establish clearly the level of atresia preliminary to a successful end-to-end anastomosis and obliteration of the fistula[3].

4. Mongolism is often associated with *high intestinal atresia*. Upright film showed a distended stomach and a second "bubble" due to the distension of the first and second portions of the duodenum. Potts has adequately emphasized the diagnostic importance of "vomiting green" and a "double bubble." Duodenojejunostomy was successful[4].

5. *Meconium peritonitis*—free air in the peritoneal cavity, with linear calcific shadows. Often a neonatal feature of fibrocystic disease of the pancreas. While this infant survived surgery, she succumbed four years later with cor pulmonale and severe pulmonary fibrosis[5].

6. Anoxia had probably caused the congestion and hemorrhages noted at autopsy—including considerable intraventricular hemorrhage—but this infant also presented a *mediastinal air block*, multiple emphysematous blebs throughout both lungs, several of which had apparently ruptured to cause pneumothorax. Important as positive pressure efforts at resuscitation may be in selected cases, the operator should *know his own strength*, should avoid any conspicuous distension of the thorax, and should limit the positive pressure to short "jet-like bursts" to avoid this most unfortunate complication of a well-meant maneuver[6].

7. Prolonged bleeding time, a normal clotting time, and a normal number of platelets together with a prothrombin time of 49 seconds (contrasted with a control of 13 seconds) made a diagnosis of *hemorrhagic disease of the newborn*, for which prompt fresh transfusion is the only practical effective therapy; one cannot depend on conversion of Vitamin K in this situation, though its administration may be considered as a potentially useful supportive measure[7].

8. Such progressive uncontrollable bleeding suggests severe *hypofibrinoginemia*. The mother had no recognized placental disorder, no bleeding tendency or clotting defect that could be demonstrated. In this case, therapy came too late. There was no clot formation in a tube held for five days or in serum held at 56° for 60 minutes; electrophoresis showed a low level of fibrinogen[8].

9. As the transfused cells were used up, spherocytosis became conspicuous and increased fragility was demonstrated to establish the diagnosis of *familial hemolytic anemia* in Negro newborns! Other members of the family had spherocytosis and increased fragility, but were not so severely affected. Remarkable improvement followed splenectomy at two months, but one of the siblings died of pneumonia 15 months later[9].

10. Fluoroscopic examination with a barium swallow showed indentation of the esophagus characteristic of a *double aortic arch*. On the fourth day, a patent ductus arteriosus, which contributed to a complicated complete aortic ring, was divided and the subsequent course was satisfactory[10].

11. The upright film showed air under the diaphragms, and a decubitus film showed this to be free in the peritoneal cavity. At surgery, there was a large *posterior gastric perforation* requiring subtotal gastrectomy. The perforation was apparently related to congenital absence of any external muscle layer on the posterior stomach wall[11].

12. The variations in clinical picture which may be explained by malrotation of the embryonic midgut loop seemed to justify the attempt to demonstrate such a cause by establishing the position of the cecum. When this failed, prompt surgery disclosed *volvulus with gangrene* of the entire midgut loop, requiring resection. Not enough gastrointestinal tract remained to support nutrition, though the infant did survive for 23 days with diligent parenteral feedings[12].

13. Though *congenital pneumonias* may occur without such suggestive antecedent circumstances as in this case, either febrile disease in the mother, or premature rupture of the membranes are commonly associated. Despite diligent treatment, this infant expired at the age of nine hours and before cultures had been returned. Autopsy demonstrated extensive confluent bronchopneumonia, cultures yielded staphylococci[13].

14. There were many features here to

suggest congenital cyanotic heart disease, infection, and congestive failure. The left axis deviation in the ECG permitted speculation as to tricuspid stenosis with compensatory higher defects. The infant expired shortly after admission and an autopsy disclosed *acute bacterial endocarditis of a stenosed tricuspid* valve, large auricular and ventricular septal defects, extensive bronchopneumonia and chronic passive congestion of the viscera[14].

15. Infection, dehydration, and electrolyte disturbances combine commonly to "set the stage" for a number of *thrombotic manifestations*. Here, there was an infarcted right kidney with a perinephric abscess, apparently due to thrombophlebitis involving the inferior vena cava and right venal vein[15].

16. The sequence here suggested salt and water hormone deficiency associated with *congenital adrenal hyperplasia;* the blood chemical findings are not always so confirmatory and may at times be confusing. The excretion of 17-ketosteroids in the urine amounted to 15 mg. in the first 24 hours, later fell to 4 mg. Therapy by close individualized adjustment of hydrocortisone, desoxycorticosterone, salt, glucose and fluid yielded a satisfactory early result[16].

17. This infant unfortunately expired during the first hour, before the clinical suspicion of *diaphragmatic hernia and congenital heart disease* could be confirmed or treated effectively. There was complete absence of the left leaf of the diaphragm; the left lobe of the liver, spleen, and upper intestinal tract occupied the left thorax, displacing the heart and mediastinum to the right. The lungs, of course, were hypoplastic and atelectatic, and as often happens with diaphragmatic hernia, malrotation was also present. An incidental and unexplained finding was a large tentorial tear with extensive hemorrhage into the posterior fossa[17].

18. As in case 6, *mediastinal air block* with emphysematous blebs and pneumothorax apparently resulted from prolonged efforts at resuscitation through positive intratracheal pressure; in this baby, the pathologic manifestations of asphyxia related either to the delivery or to the events afterwards, were not so striking—there was no gross intracranial hemorrhage but only scattered petechiae, a few subarachnoid hemorrhages, and a moderate degree of visceral congestion. Most of the lung not occupied by blebs was unexpanded ("fetal atelectasis").

19. Cause-and-effect relationships here are not yet entirely clear, but we have the conviction that some *babies born of mothers who have received reserpine* exhibit this very characteristic set of symptoms—apathy, shallow and inadequate respirations, with slight cyanosis and a conspicuously "stuffy nose." So far as we know at present, therapy is symptomatic and supportive—with a generally good prognosis in otherwise normal infants.

20. For a number of years, all cases of *cytomegalic inclusion disease* in newborns were recognized only at autopsy; inclusions are found in most tissues examined. Later, these were demonstrated in epithelial cells in urinary sediments. This, together with the occasional appearance of suggestive hazy choroidal calcification may permit a clinical diagnosis. So far as we know, at present, there is no specifically helpful therapy. The clinical manifestations and course are those of fulminating sepsis with hemolysis and often hemorrhagic manifestations.

Summary

Again, it should be re-emphasized that the protocols chosen for illustration here have been abbreviated to include directly pertinent diagnostic information; many or most of the "red herrings" which plague the clinician have been omitted. Our purposes have been purely provocative! We are fully aware that attitudes and convictions as to diagnosis and management of the types of problems we have selected for illustration will vary from physician to physician and from time to time. Backgrounds or experiences, always influencing or affecting attitudes and progress in medical thinking, will vary greatly. It is *not* our contention that the things we thought about or did were necessarily completely correct — we may do differently in some similar situations when next we encounter them!* •

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*We wish to thank all the house officers who made good notes on the records we examined to prepare these brief protocols, and also the nurses, consultants, and technicians who helped us with them.

Anterior excision of ruptured cervical intervertebral disc

*and interbody fusion (Cloward)**

Ralph M. Stuck, M.D., Denver; Robert F. Hall, M.D., Grand Junction; and Robert R. Oden, M.D., Aspen, Colorado

A new and strongly defensible technic for treatment of a major and increasing injury problem.

THE INCREASING SPEED of modern transportation has resulted in great increase in accidents which shock and damage the human body. Collision at these increased speeds results in damage to the bodily structures that are most vulnerable either by their inherent nature or by the situation in which they are placed. Most parts of the body if protected by crash pad, safety belt, head rest or other proper means of deceleration may escape serious damage. But very few means of transportation provide such protection for the neck. As a result, neck injury (whip-lash) is rapidly becoming a major injury problem.

The neck may be damaged in other ways than by whip-lash. For instance, a person may slip and fall striking his head in such a fashion as to wrench his neck, he may receive a blow to the head that compresses his neck, or he may sustain a direct blow to the neck. Injury may also occur to the cervical structures from repeated attritions, as in boxing or jolting.

As a result of such injury, soft tissues of the neck, the cervical spine and cervical intervertebral discs may be contused, lacerated, fractured or ruptured. Stress, often applied in a whip-cracker or shearing-tearing fashion, may result in stretching and tearing of ligaments, muscles and other soft tissue structures, stretching, tearing or crushing of nerve structures, fracture and dislocation of bony structures, and crushing, fracturing and dislocation of disc structures. Location and extent of damage to neck structures can be determined in part by clinical symptoms and objective physical findings. Headache and shoulder pain, though usually indicating a general effect upon these structures, may assist in identifying the exact neck structures injured and the extent of their injury.

Pain areas

Pain may be in the neck and back of the head and may extend forward behind the eyes; it may be in the region of the scapula, pectoral region, or in the shoulder, arm, forearm or hand. Numbness and tingling may be experienced in the arm, forearm, hand or fingers. Weakness may be in muscles of the shoulder girdle, arm, forearm or intrinsic muscles of the hand.

Tenderness may be found along the cervical spine and in muscles which are painful. Weakness and wasting may be seen in muscles of the shoulder girdle, arm, forearm and hand. Sensory changes may be difficult to elicit; however, they may be indicative of nerve root injury and should be searched for diligently. Reflex changes, too, may indicate

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nerve root involvement. In this survey Keegan's[1] plan of distribution of cervical nerve roots should be followed as it has proved to be the most accurate.

In addition to physical signs, x-rays may be of extreme value in establishing a diagnosis in neck injury.

Our experience with cases of neck injury has led us to conclude that the cervical intervertebral disc is damaged much more often than has been believed in the past and that many patients with neck injury and a diagnosis of neck sprain actually have one or more symptomatic degenerated cervical intervertebral discs requiring excision and spinal fusion.

Use of discogram

By the use of the discogram[2], a relatively new x-ray procedure in the cervical region, we have demonstrated damaged discs in most neck injured patients whose symptoms have not subsided under conservative treatment in a period of three months. Moreover we have found that anterior disc excision with nerve root decompression and interbody fusion brings relief of these symptoms. Our experience has led us to conclude that the complete neurological and clinical pattern of symptoms commonly attributed to injured cervical disc and called by some physicians the "cervical syndrome" is not necessary to establish the diagnosis of ruptured cervical intervertebral disc. Routinely we examine and record the complaints and physical findings in these patients. We also endeavor to obtain x-rays of the cervical spine which include A-P, lateral, oblique, and flexion and extension views. (We no longer find myelography essential unless a spinal cord tumor is suspected.)

Cervical discography in our hands has proved to be the most significant test in determining disc injury. Through its use, the disc or discs involved can be determined accurately, the extent of the damage can be estimated, and the clinical symptoms can be reproduced during the test, a fact that further accurately localizes the lesion. A patient with an injured neck should be treated conservatively for a period of three months. At the end of this time if his symptoms are still disabling, we believe a discogram should be performed. If the discogram reveals disc injury and if during this test his symptoms are aggravated, he should be operated upon.

Until recently almost all cervical disc surgery was performed by posterior laminectomy. Often cases were classified as to whether or not bony reaction occurred and whether the disc was soft or hard, laterally or medially displaced. Various modifications of posterior laminectomy were used depending on the location and character of the disc. Some medical writers have reported a relatively large series of cases. These procedures in themselves are technically difficult and in many instances hazardous. They involve deep muscle splitting and partial or complete excision of laminal arches. They are often accompanied by excessive epidural venous bleeding. In most instances the spinal cord must be handled, and additional neurologic injury may result from this handling. The convalescence in these cases is long and permanent partial disability is conspicuous. A few cases have been permanently totally disabled.

Posterior cervical laminectomy for ruptured cervical disc is now considered a procedure to avoid wherever possible. Cleveland[3] states that ". . . surgical treatment for the cervical syndrome is generally a last resort and should be used only after nonsurgical treatment fails." Consequently most surgeons who have done posterior laminectomies have searched for a better method.

About ten years ago interest was shown in an anterior surgical approach to the cervical disc problem, but no definite procedural plan was devised. Then in 1955 Robinson and Smith[4] reported an anterior approach, primarily for the purpose of removing the affected disc and doing an interbody fusion, which had quite favorable results.

Ralph B. Cloward[5], of Honolulu, Hawaii, after surveying the problem of ruptured cervical disc and studying the anterior surgical approach to the cervical vertebrae, developed the method on which he has recently reported. The incision is made anteriorly in the neck and dissection is carried downward lateral to the trachea and esophagus and medial to the sternomastoid muscle and the structures contained in the carotid sheath.

The intervertebral disc to be operated upon is again identified by x-ray and is excised by sharp dissection and by means of a coring drill. The nerve roots in the nerve foraminae are decompressed by removing the medial wall of the bony foraminae along with the encroaching osteophytes. Finally a plug of bone is cut from the ilium and inserted between the vertebra, thus resulting in an interbody fusion.

Cloward states, "Technically it is possible to remove completely both soft-tissue and bony elements encroaching upon the nerve roots or the spinal cord a great deal more satisfactorily than has ever been possible by the posterior approach. The dangers of injury to the spinal cord and nerve roots in the posterior operation, usually by hemorrhage and/or retraction, are almost entirely eliminated. Finally, the most important contribution to this treatment of degenerated cervical disk (cervical spondylosis) by this new procedure is the fact that the vertebral bodies are firmly fused together in a very short period of time. This arrests the degenerative process at the joint which, if permitted to continue, may accumulate large osteophytes on the margin of the vertebra with encroachment upon the spinal canal and possibly result in chronic irreparable damage to the spinal canal and/or nerve root."

In the cases we are reporting, we have used exclusively the technic Cloward described and demonstrated to us. We are convinced that the operative procedure of choice for disabled cases of ruptured cervical intervertebral disc identified by discography is anterior excision of cervical disc, decompression of the nerve roots, and interbody fusion. •

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Management of lymphomas and leukemias*

Matthew Block, M.D., Denver

Treat the patient when symptoms are sufficient to cause interference in comfortable living. Do not treat the elevated WBC. Control, not cure, is the aim of therapy.

HEMATOPOIESIS IS AN ORDERLY PROCESS involving maturation and proliferation of immature cells to replace circulating blood cells which have died off as a result of senescence or of leakage from vessels. Under normal circumstances blood formation is homoplastic in that the precursors of a lineage give rise to cells of that lineage (erythroblasts to red cells and metamyelocytes to granulocytes). Under conditions of stress reticular cells may give rise to any and all the blood cells by differentiation through the various lineages, a process known as heteroplastic blood formation. For obscure reasons in postnatal life, myeloid cells are formed in the marrow and lymphoid cells in the thymus, spleen, lymph node and lymphatic aggregations in various organs. However, embryologically and phylogenetically there is no separation of lymphatic and myeloid tissues.

Basic histogenetic concepts

Hematopoiesis may then be most simply considered to depend on a reserve of isomorphous reticular cells which form the sup-

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Normal hematopoiesis

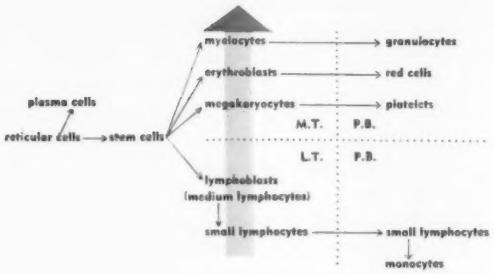

Fig. 1

Hematopoiesis in chronic lymphatic leukemia

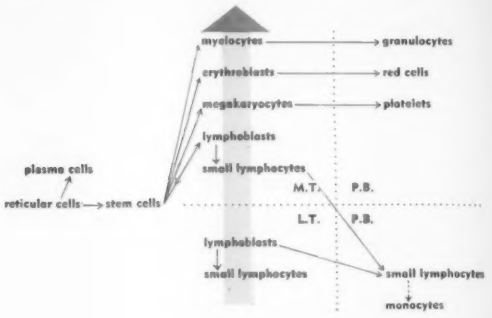

Fig. 2

Fig. 1 and Fig. 2. P.B. peripheral blood; M.T. Marrow or myeloid tissue; L.T. lmyphatic tissue. Arrow indicates cells susceptible to irradiation and chemotherapeutic drugs. Steroids affect only lymphoid cells in hematopoietic tissues.

porting framework of all the hematopoietic tissues. These reticular cells mature through a free stem cell into the various cell lineages, terminating in the production of mature cells for the peripheral blood (Fig. 1). In the leukemias and lymphomas this orderly process of maturation and proliferation is destroyed (Fig. 2). However, the reticular cell still remains as the ultimate source of all cells.

These considerations have certain important implications. First, the malignancies of the hematopoietic tissues are multicentric in origin since the reticular cell which is the source of hematopoiesis is present in all hematopoietic and connective tissues. The mere fact that on physical examination nodes in a lymphoma are found only in one area is not proof that microscopically evident disease is not already present some other place. Surgical removal of a "primary" focus is therefore illogical. Clinical experience substantiates this concept in the overwhelming majority of patients.

Second, leukemia and lymphoma are not diseases of the blood but of the blood forming tissues. The peripheral blood changes are a result of spillover from the diseased hematopoietic tissues. In the past our attention has been diverted to secondary and tertiary manifestations of the primary defect in the hematopoietic tissues, especially the height of the white count.

Three, certain cells are sensitive to radiation and radiomimetic drugs. These cells are lymphocytes, erythroblasts, myelocytes and megakaryocytes. Reticular cells are comparatively insensitive. Sensitivity is dependent upon the type of cell and its location and not upon whether it is mature or immature, rapidly dividing or intermitotic, or malignant or nonmalignant. As a result treatment can only be suppressive as long as any reticular cells remain as a source of regeneration of the other cells and because malignant and nonmalignant cells are equally sensitive to therapy.

Diagnosis

The first step in treatment is an accurate diagnosis. The leukemias and lymphomas may be diagnosed only by microscopic examination. Since the disease resides in the hematopoietic tissues it is only logical that our efforts should be directed in that direction. When reliance is placed upon the peripheral blood one must always realize that the latter represents at most a spill-over of the disease and not the disease itself. Consequently a diagnosis may be based upon the peripheral blood findings only when the latter are pathognomonic. In this way we will avoid the all too frequent confusion of lymphatic leukemia with infectious mononucleosis, of aleukemic leukemia with aplastic anemia, and of chronic myelogenous leukemia with leukemoid reactions especially infections, polycythemia vera and myeloid metaplasia.

Therapy

A. Indications for Specific Therapy

Our efforts should be directed at maintaining the patient in the best possible condition for as long and as useful a life as possible. We must discard such will-o-the-wisps as burning out the disease, emptying the marrow of malignant cells, cutting out supposed localized disease, or judging remissions by the level of the white count. *The sole indication for treatment should be activity or imminent activity of the disease process of such a nature as to interfere with the patient's ability to live a normal life.* Activity may most logically be evaluated by consideration of three aspects, systemic, local and hematopoietic.

Examples of systemic manifestations are weight loss, malaise, anorexia, chills and fever, and loss of ambition for performance of ordinary duties. They may best be described as being influenzal in type. These symptoms are just as real to the patient as an anemia is to the physician. They probably are the most important indications for treatment. The only two which may be measured objectively are weight loss and fever. Consequently each patient should have temperature and weight recorded on each hospital and office visit.

Hematopoietic manifestations of activity are attributable to a lack of normal cells in normal number in the peripheral blood. An example is the lack of platelets or increase in number of platelets leading to a hemorrhagic diathesis and/or thrombosis. There is still no evidence that an increased number of white cells in the peripheral blood per se is harmful or a cause of disability.

Local manifestations are related to the presence of a local tumor interfering with normal function or causing pain or disability in a specific area. A collapsed vertebrae in multiple myeloma with pain and transverse myelitis, a mediastinal mass in Hodgkin's with dyspnea and cough, or a lymphosarcoma causing bowel obstruction are all examples.

B. General Considerations

Therapy may be classified into specific and non-specific. The latter include measures directed at secondary or tertiary manifestation such as transfusions for fatigue and weakness secondary to anemia. The former include treatment directed at inhibiting the activity of the disease process itself, such as x-ray, mustards, and steroids. Specific therapy may in turn be classified into local (x-ray) and systemic therapy (spray irradiation, isotopes, chemotherapy and steroids). X-ray therapy has the logical and practical disadvantage of treating a systemic disease by local means. However, fairly frequently symptoms arising from a local lesion may be serious enough to warrant such therapy. Local x-ray therapy has a major advantage of directing an extremely intense effect upon a small area, much more intense than possible with agents that act systemically.

None of the agents in use has any direct effect upon the cells in the peripheral blood. Consequently peripheral blood changes represent an indirect effect due to the fact that the production and release of cells by the hematopoietic tissues is inhibited while the rate of destruction or senescence of peripheral blood cells proceeds unchanged. As a result one has to contend with one of the most insidious aspects of treatment, the fact that changes in the peripheral blood reflect damage to the hematopoietic tissues due to treatment given eight to ten days earlier. Conversely put, the effect of any single dose of therapy may not be apparent in the peripheral blood until a lapse of eight to ten days.

Another unappreciated aspect is that the same changes may be produced in the tissues by a given agent regardless of whether or not a remission is induced. Because of these inhibitory or destructive changes the peripheral blood count of all elements may be lowered without necessarily inducing a remission.

Therapy may be given intravenously, intramuscularly, subcutaneously or orally. Any drug, especially an insoluble one such as penicillin or ACTH in oil when given intramuscularly or subcutaneously will cause a local hemorrhage in patients with a hemorrhagic diathesis, an all too frequent problem in these diseases. At best such treatment will cause a painful hematoma in a patient already seriously ill. At worst, subcutaneous or intramuscular treatment will cause a major hemorrhage followed by a necrotic

slough. Consequently, oral or intravenous therapy should be given wherever feasible.

As yet there is no evidence that specific therapy increases the duration of life in the chronic leukemias or lymphomas. All forms of specific therapy damage normal hematopoietic tissues as well as malignant tissues. Consequently one must avoid overtreating a comparatively benign chronic lymphoma or leukemia and producing an aplastic anemia. Since the course of these chronic diseases may be benign one must always maintain a sense of proportion concerning whether the patient is doing well because of or in spite of therapy.

C. Therapy of specific diseases

Chronic lymphatic leukemia frequently is a benign disease and often exists in an asymptomatic state for as long as 10 years. It is the prime example of a leukemia which is often overtreated or treated when the patient is best left alone. X-ray therapy is still the treatment of choice for symptoms due to local lesions while TEM, HN_2 or P^{32} may best be used for the systemic manifestations. In long standing burnt-out cases steroids may be useful. In this connection, there is no evidence that ACTH offers any advantage over cortisone or related compounds which may be taken orally or intravenously.

Chronic myelogenous leukemia has classically been treated by irradiation of the spleen. The much quoted statement that splenic x-ray has an inhibitory effect on the marrow has no basis. Frequently a thrombocythemia is found leading to a combined hemorrhagic and thrombotic tendency. This abnormality must be treated by systemic agents (P^{32} myeleran) rather than by local x-ray therapy. When a transformation to an acute myelogenous leukemia has occurred 6-mercaptopurine will induce a remission in about a third of the patients.

The *acute leukemias* are all too frequently unaffected by treatment, particularly in adults. A major obstacle to progress is the disagreement even amongst hematologists regarding the classification of the acute leukemias. In adults a remission lasting up to a year may be induced in about a third of patients with acute myelogenous leukemia by means of 6-mercaptopurine. The remission rate is about twice as high for children with the same disease.

Steroids are the most effective and least dangerous agents in acute lymphatic leukemia; however, remission rates are much higher in children than adults. Aminopterin has the advantage of inducing the longest remissions in acute lymphatic leukemia in children. In my own experience it has been useless over the age of 15. Monocytic leukemia will not be discussed since many hematologists doubt its existence.

Hodgkins disease may best be managed by a combination of x-ray and mustard (HN_2, TEM, chlorambucil). Mustards, of course, are better for systemic manifestations than is x-ray therapy. HN_2 has the advantage over triethylene melamine (TEM) and over chlorambucil in that there is a known dose level (0.4 mgs/kg). If this dose does not produce a remission, higher doses are useless. When using TEM or chlorambucil it is often difficult to determine whether a therapeutic dose has been given or whether the patient is refractory to treatment. All forms of mustard when given in therapeutic dose are equally effective.

Lymphosarcoma may be treated in a similar manner to Hodgkins. In addition P^{32} may be used for systemic therapy.

Reticulum sarcoma or Hodgkins sarcoma is usually a highly malignant disease. Treatment may be attempted by x-ray or HN_2 but usually is not effective. Resistance to therapy is probably related to the predominance of reticular cells.

Multiple myeloma may vary from a temporarily localized lesion to a widespread highly malignant systemic disease. It is doubtful that any systemic therapy including urethane has any beneficial effect upon multiple myeloma. However, local lesions may be treated at least temporarily by intense x-ray therapy.

Giant follicular lymphoma is, with chronic lymphatic leukemia, the most benign of the lymphomas. It may be treated similarly to lymphosarcoma but results are much more gratifying. Over a variable number of years both diseases tend to transform into acute or subacute lymphatic leukemia. They are then highly resistant to all specific therapy except possibly steroids.

D. Nonspecific therapy

Anemia is one of the more common complications. The major consideration is not the level of the hemoglobin but the patient's adaptation to the level. As long as the patient is capable of a fairly normal life the anemia of itself needs no treatment. In general the best approach is treating the primary disease. Transfusions should be used as sparingly as possible. Blood transfusions will not significantly elevate the white or platelet count unless specifically processed to preserve these cells.

Since the total blood volume is usually normal, red cells alone are preferred, lessening the incidence of untoward reactions. An easy, inexpensive way to do this is to store all blood upside down so obtaining a partial to sometimes complete layering of the plasma over the red cells. There is no place for iron, liver, B_{12}, folic acid or any of the all too numerous shotgun remedies.

Fever, malaise and other influenzal symptoms frequently respond to aspirin. It is amazing how control of these symptoms may return an otherwise ill patient to a fairly active life. Aspirin has the disadvantage of causing severe diaphoresis. Codeine is occasionally effective.

Surgery is useful almost exclusively as a diagnostic tool. Rarely a local gastrointestinal or orbital lesion may be removed in lymphosarcoma or multiple myeloma. However, there is no proof that local therapy would not have been just as effective. With steroids now readily available, splenectomy for hypersplenism is becoming unnecessary.

Steroids play an important and somewhat unpredictable role. They have a nonspecific euphoric and antianorexic effect. These benefits are practically nullified by the side effects, induction of diabetes, fluid retention, osteoporosis and flaring up of infections, especially the systemic granulomas such as tuberculosis and fungus infections. Where hypersplenism plays a role they may be used to advantage but their action is somewhat inconsistent.

Anorexia with malnutrition is quite frequent. Outside of treatment of the primary disease there is little to offer. Tonics, sedatives and dietary supplements are useless. Of importance is the realization that the more medication a patient gets the less likely he is to eat. The most nutritious food is the ordinary American diet. There is no more certain way to ruin a good appetite or worsen an already finicky appetite than by unnecessary oral or, even worse, unnecessary and often painful parenteral medication.

The patient's psyche is all important. Every patient should live as normal a life as possible. Psychiatric help is usually of no benefit. The best psychiatrist is the physician who has a sympathetic ear and who is able to impart the proper amount of information needed to rationally help the patient understand his disease but not so much as to awaken needless fears.

Summary

The most rational approach to the therapy of the leukemias and lymphomas is to remain cognizant of the fact that the purpose of therapy is not to cure but to prolong useful life. Accordingly, the most logical indication for treatment is activity of the disease in a manner that interferes with the patient's sense of well being. •

Pneumatosis cystoides intestinalis*

David E. Dines, M.D., Marshall G. Nims, M.D., and Lorenz R. Wurtzebach, M.D., Denver

PNEUMATOSIS CYSTOIDES INTESTINALIS is a rare disease manifested by gas filled cysts involving different portions of the gastrointestinal tract. In view of the fact that the lesion was first discovered by rectal digital examination in this patient, and because of the rarity of the disease, and possible confusion with carcinoma of the rectum, a case report was felt to be warranted.

CASE REPORT

A 55-year-old white male was seen by one of us at his home early in June, 1958. The patient stated that for the past several months he had been suffering from resistant constipation and cramp-like pains in the lower abdomen. There had been no diarrhea, melena, weight loss, nausea or vomiting. On examination the abdomen was moderately distended, no masses could be found and peristalsis was active. On rectal examination the entire area as far as the finger could reach was partially filled with rather discrete soft cyst-like masses. Because of this finding the patient was referred to a proctologist. The examination was restricted by the presence of many rather thin walled cyst-like structures which seemed to occur in groups and were covered by rather normal appearing mucosa. See Fig. 1. Only slight bleeding was induced. It was concluded that a foreign body reaction was present and that a neoplasm could not be excluded. The patient was hospitalized for further study.

Past history revealed a rather complicated picture. In September of 1953 the patient had undergone a transurethral prostatectomy. There were no immediate complications. The patient was sent home in seemingly good condition. During the next six weeks he noted gradual onset of general body aching, occasional chilly sensations and a general feeling of malaise. Because of the increasing severity of these symptoms, consultation was requested by his family physician. A soft diastolic and presystolic murmur was heard and a diagnosis of a subacute bacterial endocarditis was entertained. After prolonged hospitalization and very aggressive therapy, improvement was noted and the patient was discharged with evidence of rather marked aortic insufficiency. Nothing remarkable occurred until the onset of the present illness except one bout of rather mild decompensation which responded well to digitalization and diuretics. The past history was otherwise negative. No exposure to possible etiologic chemicals could be found to account for the rectal lesions.

Examination on admission revealed a well developed, well nourished white male not appearing acutely ill. Pupils were equal and regular and reacted to light and accommodation. Eye grounds were within normal limits for age. Nose and ears were not remarkable. The tongue was moderately coated. The pharynx was negative. There was moderate postnasal drip. Teeth were in good repair. Thyroid was not palpable and there was no adenopathy noted in the neck region. Chest expansion was equal and the lungs were clear and

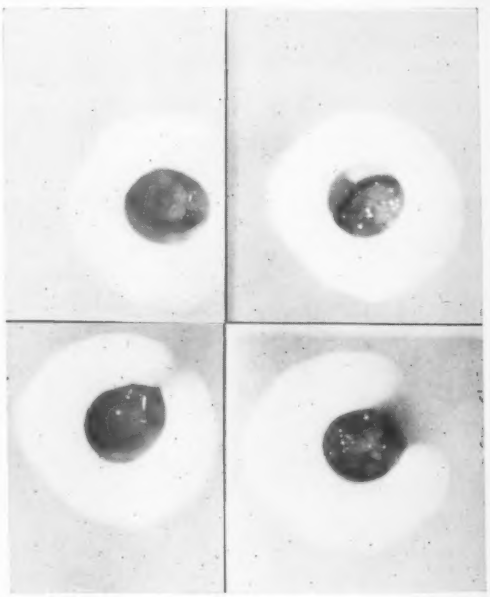

Fig. 1. Four views taken through a proctoscope of the gas filled sacs in the rectum about five inches from the anus.

*From the Department of Medicine, St. Luke's Hospital, Denver.

resonant throughout. Examination of the heart revealed definite enlargement to the left. The rhythm was regular. A loud harsh systolic murmur was heard in the aortic area together with a grade two diastolic murmur. Examination of the abdomen did not reveal any masses, tenderness or other abnormality. The liver and spleen could not be felt. Genitals were normal male. Results of the rectal examination have been described. Reflexes were physiological.

Routine laboratory work at the time of admission was within normal limits including the sedimentation rate. Proctoscopic examination (Fig. 1) showed gas filled sacs in the rectum about five inches from the anus.

X-ray examination of the lower bowel was completed with some difficulty. A barium enema done on June 20, 1958, revealed many diverticula in the sigmoid and descending colons. No evidence of significant colon obstruction was portrayed. Irregularity of the wall of the rectum and lower sigmoid was seen, but this could not be completely evaluated because of the presence of some retained fecal material. The barium enema was repeated on June 23, 1958 (see Fig. 2), after further cleansing of the colon. This study revealed more clearly that the surfaces of the rectum, sigmoid and descending colons were irregular due to the presence of small air-filled pockets within the walls of the bowel. These cysts were characteristic of pneumatosis cystoides. The colon proximal to the splenic flexure was not involved. Pneumoperitoneum was not present.

A follow-up barium enema was done on Aug. 7, 1958 (Fig. 3), at which time the rectum and sigmoid colon appeared much improved. There were fewer air-cysts present. The descending colon was completely free of cysts. The diverticula in the sigmoid and descending colons were again visualized as on the previous examinations.

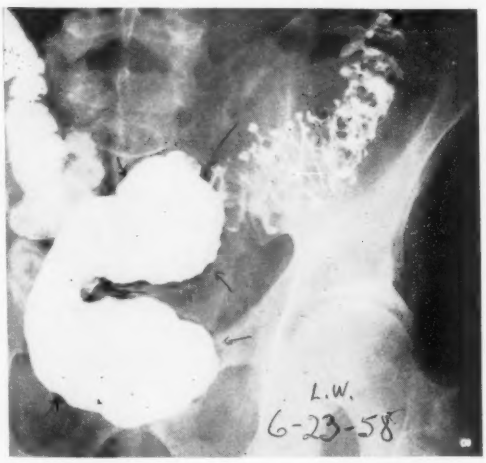

Fig. 2. Air-cysts in walls of rectum, sigmoid and descending colons indicated by arrows. Many diverticula in the sigmoid.

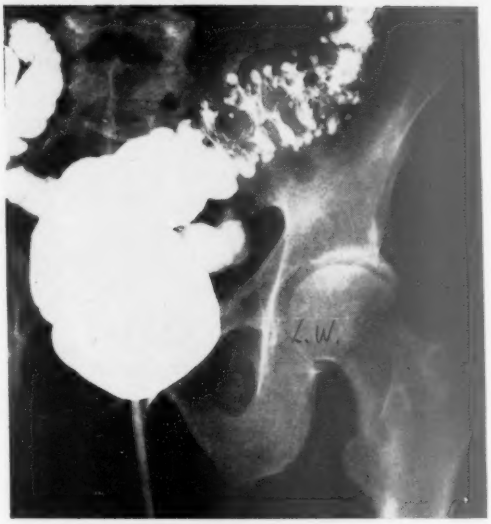

Fig. 3. Re-examination of colon seven weeks after initial study. Most of the air-cysts have disappeared from the wall of rectum, sigmoid and descending colons.

The pathological report was as follows: Specimen: Rectal biopsy. Gross description: The formalin-fixed specimen consists of two ovoid fragments of soft gray tissue covered on one surface by gray-tan mucosa. These fragments measure 7 x 6 x 4 mm., and 5 x 4 x 4 mm. On section there are small cystic spaces approximately 1 mm. in diameter. Microscopic description: The biopsy is covered by essentially normal rectal mucosa. There are scattered fresh proprial hemorrhages. Within the submucosa are a number of cystic spaces, some of which are lined by flattened cells, possibly representing endothelium. A number of the spaces are lined by prominent multinucleated foreign body giant cells. No material is seen within the spaces. The adjacent submucosal tissue is moderately fibrotic and focally infiltrated by lymphocytes and rare eosinophile. Diagnosis: Pneumatosis intestinalis.

It was concluded from the above information that the patient was suffering from pneumatosis cystoides intestinalis and that interference was not indicated. The appearance of the lesions is presented in the illustrations.

Sigmoidoscopic examination of the area was completed each week. The lesions remained unchanged until early in August when in a period of about ten days the lesions became deflated, leaving wrinkled pit-like areas. The mucosa still seemed normal.

Discussion

Pneumatosis intestinalis is the general

term applied to the disease process involving any portion of the intestinal tract. Pneumatosis coli refers to the condition in the colon as manifested by intramural collections of gas in sessile or pedunculated cysts. The primary type occurs without any associated gastrointestinal involvement and usually is diffuse. The secondary form is the more common type, and is associated with other lesions of the gastrointestinal tract, usually stenotic lesions in the pyloric area. The small bowel is most frequently involved in the cases associated with pyloric stenosis. The associated lesions described with gas cysts include carcinoma of stomach, regional enteritis, tuberculous enteritis, chronic ulcerative colitis, appendicitis, intestinal obstruction due to gall stones, intestinal parasites, and gastric and duodenal ulcers. In 1952 Koss reviewed the world literature and found 213 cases; 125 cases had involvement of the small intestine, 9 had involvement of both the small and the large intestine, 34 had involvement of the ileocecal region, and 13 had the colon involved. The first satisfactory and well documented description of the disease was made by Bang in 1876 in a female who died of volvulus of the colon, and the condition was found at necropsy. The first American report was made by Finney in 1908. In 1949 Gazin, et al., reported the first American case to be diagnosed preoperatively and confirmed by surgery. Carter and Wilson described the forty-fifth case in the American literature and the fifth case to be diagnosed preop. In 1955, Lowenstein, Berry, and Cuykendall described the first case diagnosed by means of a therapeutic pneumoperitoneum in a 28-year-old patient with active tuberculosis.

The contents of the cysts are gases composed of mostly nitrogen (70-90 per cent) with a smaller proportion of oxygen (3-20 per cent), carbon dioxide (2-15 per cent), hydrogen, and methane in smaller amounts.

The condition is thought to be one of gaseous dilatation of lymphatic channels. Masson assumed that the gas resulted from lymph stagnation as a result of chemical reaction in obstructed lymph channels.

The mechanical theory of formation of the cysts implies the stomach gas under pressure from pyloric stenosis is forced into the lymphatics. Stiennon supports this theory and surmises the gas dissects along the mesenteric lymphatics accounting for the predominant serosal location and widely separated portions involved.

Studacher and Bencini injected colored water into the lymphatics of hogs and produced typical lesions of gas cysts, and concluded the disease was due to distention of lymphatics.

The mechanical theory provides the most logical explanation, and the air in the intestinal lumen penetrates towards the serosa by way of ulcerations and erosions in the mucosa. Results have been obtained in the cadaver which support this explanation of the etiology.

The bacterial theory implies the gas is formed by gas-producing micro-organisms within the lymphatics. Against this theory is the fact that pneumo-peritoneum is commonly associated, and is rarely complicated by peritonitis.

It has also been postulated that local alterations in the acid-base balance in the intestinal lumen might account for the release of gases into intramural lymphatics.

Trauma has been implicated in the formation of gas cysts of the left side of the colon. Marshak reported three cases with the lesion following sigmoidoscopy, and proposed that the sigmoidoscopy might have been the etiologic factor.

Dietary deficiency has been implicated due to the obstructing lesion of the pylorus. Eveleth created the disease in hogs by feeding them a restricted diet of polished rice, and concluded that it was nutritional.

The condition occurs mainly in men between the ages of 30 and 50 years (ratio of 3.5:1 male to female). There may be vague digestive and abdominal complaints, but there are no characteristic symptoms, and most often it is an incidental discovery at time of operation.

The disease entity can develop within a relatively short time. Dale and Pearse reported a case of a man 35 years old operated upon for carcinoma of the stomach. At the time of surgery there were no cysts, but at autopsy five weeks later there were cysts in the submucosa of the jejunum and ileum.

In several cases the diagnosis has been made and confirmed by sigmoidoscopic bi-

opsy. The preoperative x-ray diagnosis was first reported by Gazin, et al., and provides a rather characteristic finding of areas of increased translucency or filling defects between the lumen and outer margin of the intestinal canal.

Grossly the condition looks like a hydatidiform mole, and the gas cysts are found in the intestinal wall and are most often visible over the serosal surface, occurring singly or in clusters and varying greatly in size and shape. The cysts are lined by endothelial cells and the lining cells have a tendency to coalesce and form large multinucleated giant cells. Inflammation is present and varies from round cell infiltration to granulomas with epitheloid cells.

Complications of gas cysts of the intestine include pneumo-peritoneum due to perforation of a cyst. There may be intestinal obstruction due to submucous cysts obliterating the lumen, extrinsic mass of cysts compressing the intestine, or by volvulus induced by the cysts.

The differential diagnosis would include diffuse abdominal emphysema associated with infection due to gas forming organisms. Gas cysts must be differentiated from enterogenous cysts which usually are single and occasionally multiloculated.

Summary

A case is presented of pneumatosis cystoides intestinalis. The close resemblance of this benign condition to carcinoma of the rectum is stressed. The various etiological theories have been mentioned, but no definite conclusions as to etiology can be reached from this case report. Radiographically pneumatosis cystoides intestinalis provides a characteristic finding of areas of increased translucency or filling defects between the lumen and outer margin of the intestinal canal. Regression of the lesions occurred in this case on conservative management.

The case is of interest because of the rarity of the lesion and its availability to direct vision and palpation. •

Injection treatment of hemorrhoids

Gilbert L. Wright, M.D.,† Salt Lake City

An effective but often neglected office procedure.

CERTAINLY ONE OF THE MOST COMMON afflictions seen in the office of the general practitioner, surgeon, and internist is hemorrhoids. The horror stories patients have heard about surgery for hemorrhoids deter many of them from seeking qualified medical aid and drive them to seek relief from nostrums advertised in popular magazines, on the radio, and elsewhere. A hemorrhoidectomy, including the postoperative course, need not be a terribly painful procedure. At the same time, if many of these patients can be relieved by a simple office procedure, it is the doctor's duty to advise them of this fact.

Indications

Presence of bleeding internal hemorrhoids is the prime indication. The bleeding from internal hemorrhoides can be stopped by injection treatment. It is important at the same time to correct the causative factor, which is almost always constipation. This is best done by a softening agent for the stools and bowel training. I prefer Metamucil®*, but there are others probably equally as good. Once a bowel habit is developed, the softening agent can often be eliminated. If

†From the Department of Surgery, University of Utah.
*Searle and Co., Chicago, Illinois.

constipation is corrected, recurrence of the internal hemorrhoids is rare after injection therapy. When there is recurrence of internal hemorrhoids, this can be treated by injection.

Contraindications

External hemorrhoids should never be injected, for the result will be painful—akin to the pain of a prolapsed, thrombosed hemorrhoid. They are not an absolute contraindication, but it must be made clear to the patient that injection treatment will relieve his bleeding, but will *not* affect external hemorrhoids. When external hemorrhoids are present, with or without internal hemorrhoids (usually with), surgery is the best cure. If the patient is mainly concerned about the bleeding, and the external hemorrhoids are apparently asymptomatic, the internal hemorrhoids can be injected with satisfactory results.

Fistulae, fissues, etc., associated with hemorrhoids, are usually an indication for surgical treatment.

Technic

No special preparation is necessary. An empty rectum is desirable, but not essential. The anoscope is inserted and injection made directly into the hemorrhoid, one-fourth to one-half cc. being injected. The solution which I have found most satisfactory is sodium tetradecyl sulfate with benzyl alcohol*. Immediately after completing the injection, a "rectal dilator" (Young's Rectal Dilators) is inserted and left in place for five minutes. The patient lies on his side in a comfortable position. This aids in collapse and obliteration of the hemorrhoid and helps prevent extravasation of blood and solution into the surrounding tissues. I believe this step is very important and have not seen it mentioned in any other discussion of injection treatment of hemorrhoids.

Results are good and side effects rare. One or two hemorrhoids are treated at a time and usually at one-week intervals. Four to eight treatments are required. The patient is not disabled. He goes about his ordinary activity. He is advised to avoid strenuous physical activity for the rest of the day. (Injections are usually made late in the afternoon, so this causes no inconvenience to most patients.)

Results

Results are uniformly good if the above technic, contraindications and adjunctive treatment (correction of constipation) are adhered to. I have treated well over 100 patients by this method in the past six years, and have a follow-up on most of them. Some had had a previous hemorrhoidectomy. •

*Sodium Sotradecol 1% (Wallace & Tiernan Co.)

Emergencies cont. from 56

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Anterior excision cont. from 59

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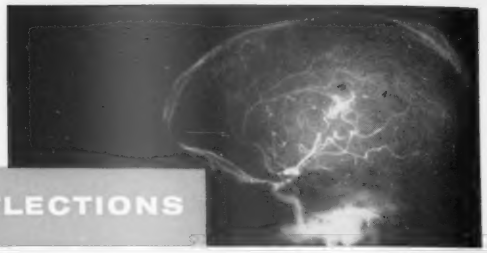
SEARLE



RADIOLOGIC REFLECTIONS

Shadow or substance

Marcus J. Smith, M.D., Santa Fe, New Mexico

Apothegm

"There is no disease more conducive to clinical humility than aneurysm of the aorta" (Osler) and to the humbling of the radiologist.

Clinical data

A 40-year-old insurance salesman complained of epigastric pain of several weeks' duration; occasionally, the pain was relieved by drinking milk. There had been two previous episodes of this type of pain and a diagnosis of peptic ulcer had been made in the past. Each time, dietary adjustment had relieved his symptoms. The physical examination and laboratory tests were quite unexciting, other than disclosing a very well developed, well nourished, heavily muscled man tending toward obesity.

Radiographic studies

A gastrointestinal examination disclosed inflammatory changes in the duodenal bulb, with a suggestion of an ulcer deformity; a crater was not categorically defined. The widened mucosal pattern of inflammation extended into the second portion of the duodenum. The x-ray diagnosis was duodenitis and ulcer deformity of the duodenal bulb.

Clinical course

The patient's abdominal distress again subsided on an ulcer diet, though he was visibly upset by the news of a recurrence of his difficulty. Two weeks later he experienced sudden, severe precordial pain while playing golf; he went into shock and died three hours later. An autopsy revealed an extensive infarct of the left ventricle with a thrombus in the left circumflex artery; advanced coronary artery atherosclerosis was present as was an arteriosclerotic aneurysm of the abdominal aorta. There were polypoid excrescences of Brunner's glands in the duodenal bulb; one collection of these in particular was thought to simulate an ulcer.

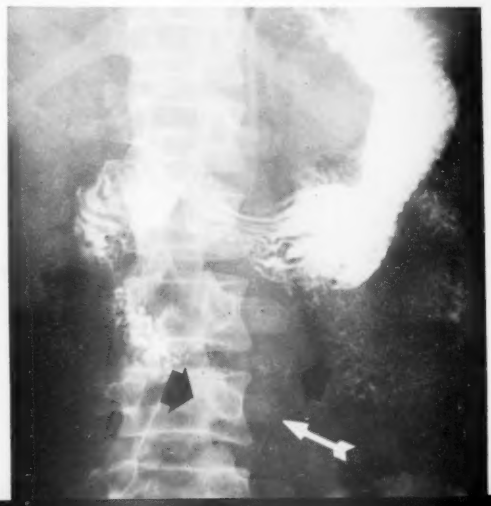
Retrospective note

Review of the films of the gastrointestinal tract demonstrated calcium deposits in the intima of a widened, dilated segment of abdominal aorta (Fig. 1, arrow, retouched). These were undoubtedly seen by the radiologist. A radiographical diagnosis of aneurysm might have been possible if the interpreter had been able to distinguish the calcium shadows from those of the contiguous barium; admittedly, this is difficult, but not impossible, if a high degree of skepticism is maintained toward our favorite drug, barium sulfate. This may not have changed the terminal event, but it would have focussed interest on the premature arteriosclerosis, the patient's major disorder.

Final apothegm

"To behold is not necessarily to observe. . . ." (W. Humboldt).

Fig. 1



THE WASHINGTON SCENE

A monthly news summary from the nation's capital by the Washington Office of the A.M.A.

Congress won the first round in a battle over medical research funds, but the Eisenhower Administration is in a strategic positon for the final outcome.

The House voted $344,279,000 for the National Institutes of Health, $50 million more than the Administration asked for in the fiscal 1960 budget. The move to increase medical research funds also had strong support in the Senate.

However, the Health, Education and Welfare Department and the Budget Bureau will have the final say on how much of the appropriated funds are spent during the 1960 fiscal year when the Administration is striving to balance the budget.

Arthur S. Flemming, Secretary of Health, Education and Welfare, vigorously denied a charge of the Democratic-controlled House Appropriations Committee that the Administration had "gone so far as to set back the medical research program . . . in a desperate attempt to present, on paper, a balanced budget." Flemming said the committee was trying to give a "clearly misleading" impression. He also said it was hard to see how the Administration's $294 million program could be regarded as a backward step.

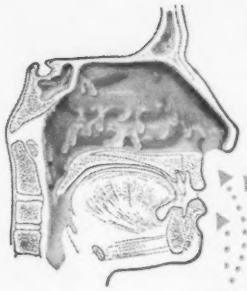
Flemming pointed out that the Administration request was for the same amount voted by Congress last year. And, he added, some of last year's appropriation will not be spent this fiscal year.

At the same time, U. S. Surgeon General Leroy E. Burney testified before a Senate Appropriations Subcommittee that there was a shortage of trained personnel in all fields related to human health, including medical research.

Rep. Francis E. Dorn (R., N. Y.) again has introduced a bill that would provide for a special commission making a study of the supply of physicians. In a letter put in the Congressional Record, Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association, envisaged an adequate supply on a long-range basis. He said: "Over the long haul, the increase in medical students is much greater proportionately than is the increase in the population. . . . The future, I believe, looks bright."

A government-sponsored, six-year study of the causes of cerebral palsy, mental retardation and kindred defects in children is now under way in 16 private hospitals and universities.

continued on 76



when pollen allergens attack the nose...

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These antihistamines block the effect of histamine on the nasal and paranasal capillaries, preventing dilation and exudation.[3] *This is not enough;* by the time the physician is called on to provide relief, histamine damage is usually present and should be counteracted.

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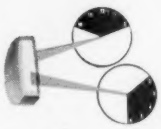

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Washington Scene cont. from 74

The study involves no experimentation, only observation. About 40,000 women will be kept under close check from the second or third month of pregnancy through childbirth. Observation of their children will be maintained through six years of age.

U. S. scientists have blamed Russia for most of the radioactive fall-out thrust into the atmosphere in the last two years. But testimony before a Joint Congressional Committee on Atomic Energy estimated that over-all the United States and Great Britain had created nearly three times as much radioactive debris by testing nuclear weapons as the Soviet Union had.

Russian tests were described as "extremely dirty" as to radioactive debris. However, the Russians have not exploded as many test weapons and devices as the Western powers have.

The scientists differed on the degree of danger to humans posed by the radioactive fall-out. John A. McCone, Chairman of the Atomic Energy Commission, said that up to now the fall-out hazard has been "very small" and not serious when compared with common hazards, including natural radiation. But he warned against a "very serious hazard" in the future if nuclear tests are not restricted by international agreement.

The Walter Reed U. S. Army General Hospital in northwest Washington quietly marked its fiftieth anniversary recently. Its 448,000 patients since it was founded in 1909 have included Presidents, Congressmen, Cabinet members and other notables. President Eisenhower underwent an ileitis operation there in 1956. Gen. John J. Pershing died there in 1948 after being a patient for seven years. The two most distinguished patients recently: former Secretaries of State John Foster Dulles and George C. Marshall.

A Food and Drug Administration official has urged that physicians use care and judgment in writing PRN and similar prescriptions for sleeping pills and amphetamines. Nevis Cook of the agency's enforcement bureau said some pharmacists have been selling the drugs too freely on such prescriptions. The FDA planned to take court action when a glaring abuse presented a strong case. The issue is whether a pharmacist improperly practices medicine by indiscriminately refilling such prescriptions.

Navy and Public Health Service scientists reported that a commercially prepared vaccine proved 83 per cent effective in preventing Asian flu in a study among naval recruits at the Great Lakes Naval Training Station. U. S. Surgeon General Leroy E. Burney said the controlled survey confirmed previous observations that "good protection results" from inoculation with the epidemic, Asian-strain vaccine.

thirteenth annual rocky mountain cancer conference

denver, colorado — july 22-23, 1959

PROGRAM

Tuesday, July 21

Afternoon

2:00-5:00—Registration.

Wednesday, July 22

Morning

8:00-4:00—Registration.

N. Paul Isbell, M.D., Denver, Chairman of Conference.

9:00—Address of Welcome—John I. Zarit, M.D., Denver, President, Colorado State Medical Society.

Symposium on Cancer of the Colon.
Moderator, Kenneth C. Sawyer, M.D., Denver.
Participants: Benjamin Castleman, M.D., Pathologist; Walter L. Palmer, M.D., Internist; Eugene P. Pendergrass, M.D., Radiologist; J. Garrott Allen, M.D., Surgeon.

Question and Answer period.

12:00 noon—Round Table Luncheon.

Presiding, A. E. Lubchenco, M.D., Denver.

Afternoon

Presiding, W. Kemp Absher, M.D., Pueblo.

2:00—"Chemotherapy of the Leukemias and Lymphomas," Edward H. Reinhard, M.D., St. Louis.

2:30—"Tumors of the Thymus Gland," Benjamin Castleman, M.D., Boston.

3:00—"Cancer of the Prostate," Louis M. Orr, M.D., Orlando, Florida.

Evening

Presiding, Ervin A. Hinds, M.D., Denver, President, Colorado Division of the American Cancer Society.

6:30—Cocktail Hour.

7:30—Dinner.
Speaker, Mr. Jeff Williams, Chickasha, Oklahoma.

Thursday, July 23

Morning

8:00-4:00—Registration.

9:15—Symposium on Anemia in Cancer.
Moderator, Matthew H. Block, M.D., Denver.

guest speakers

J. Garrott Allen, M.D.,
Surgeon, Chicago,
University of Chicago,
Department of Surgery

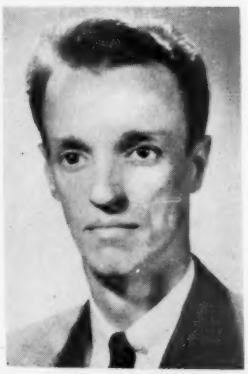
Benjamin Castleman, M.D.,
Pathologist, Boston,
Clinical Professor of Pathology,
Harvard Medical School

J. R. Heller, M.D.,
Bethesda, Director,
National Cancer Institute

Louis M. Orr, M.D.,
Urologist,
Orlando, Florida

Walter L. Palmer, M.D.,
Chicago, Internist,
University of Chicago

Eugene P. Pendergrass, M.D.,
Radiologist, Philadelphia,
University of Pennsylvania



Edward H. Reinhard, M.D.,
Internist, St. Louis,
Washington University

Mr. J. H. Williams,
Chickasha, Oklahoma
(Banquet speaker)

Participants: J. Garrott Allen, M.D., Surgeon; Edward H. Reinhard, M.D., Internist; Benjamin Castleman, M.D., Pathologist.

Question and Answer period.

12:00 noon—Round Table Luncheon.
Presiding, N. Paul Isbell, M.D., Denver.

Afternoon

Presiding, Robert N. Humphrey, M.D., Ft. Collins.

2:00—"Carcinoma of the Stomach," Walter Palmer, M.D., Chicago.

2:30—"Evaluation of Treatment of Carcinoma of the Breast in Its Total Pattern," J. Garrott Allen, M.D., Chicago.

3:00—"Advances in Cancer Research and Control," James R. Heller, M.D., Director, National Cancer Institute, Bethesda, Maryland.

3:30—"Some of the Intangibles Concerning Cancer," Eugene P. Pendergrass, M.D., Philadelphia.

4:00—Adjourn.

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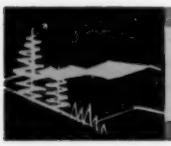
Hotel space has been reserved at the Brown Palace Hotel for physicians and their families attending this Conference. Please write to the hotel for your reservations. Address: Brown Palace Hotel, Denver 2, Colorado.



COLORADO

Mercy plans progressive patient care hospital

Plans for the construction of a new $8 million, multi-phased hospital unit for the Sisters of Mercy of Colorado were announced by Sister Mary Miguel, Administrator of Mercy Hospital.

The new eight-story, 500-bed hospital will occupy the entire city block on the present site of Mercy Hospital at East 16th Avenue and Milwaukee Street in Denver. The main entrance will face East 17th Avenue overlooking City Park.

Bids for construction of the multi-million dollar structure will be opened upon completion of architectural specifications by the firm of Linder, Wright and White, outstanding hospital architects.

The eyes of the medical world will be focused on Denver and the new Mercy Hospital. The Sisters of Mercy have taken the lead internationally in designing a hospital based upon the concept of progressive patient care.

"This approach to provide the best medical care at the lowest cost to the patient through this progressive plan is the result of considerable thought and consultation with recognized authorities in this field," Sister Mary Miguel said.

The progressive patient care concept as planned for the new Mercy Hospital calls for division of "intensive," "intermediate" and "convalescent" care as determined by the degree of illness of the patient admitted to the hospital.

The seriously ill patient will be placed in an intensive care unit, where a specially trained nursing service, utilizing complex equipment, will provide an emergency hospital within a hospital.

Proposed new Mercy Hospital, Sisters of Mercy of Colorado, Denver, Colorado. Linder, Wright & White, architects.

"Intermediate care units are to be marked improvements over the conventional floor patient care in use today," she said. "The convalescent care units will be staffed with nursing service whereby the patient will be able to move about freely and assist in meeting his own needs in a more pleasing, familiar, homelike environment than the average hospital affords. Each patient will be able to use special nursing service at the critical time when it is needed. This unit bridges the transition from hospital to home."

Cost analysis statistics have demonstrated that the convalescent unit care offsets the cost of intensive care units. The net result is that the loss of time and the cost of illness is reduced when compared to the present system.

The present South Wing of Mercy Hospital will be converted into a 200-bed hospital home for senior citizens, including small apartments for retired couples needing some medical supervision. Facilities will include rehabilitation, occupational therapy, recreational and central dining area for ambulatory guests.

Together with the plans for the new Mercy Hospital, the Sisters of Mercy envision a convent, nurses' residence, central chapel, intern and resident physicians' hall, and a research institute comparable to the most modern in the nation.

Among the many innovations in medical science to be utilized in the new project is a system of electronics in the operating rooms and delivery rooms which will monitor each patient undergoing anesthesia.

All surgical instruments will be cleaned by ultra-sonic high frequency waves. A system of "flash" sterilization will sterilize instruments in

continued on 86

Organization cont. from 80

three minutes instead of the present 20 to 25 minutes required for complete sterilization.

A complete pneumatic tube system between departments and buildings also is planned.

The present Mercy Hospital was begun in 1901 and many additions to the original structure have been made to keep pace with expanding needs. In anticipating the future requirements of Denver and the Rocky Mountain Area, the Sisters courageously decided not to build a "new hospital with old ideas," but to adopt far-seeing, revolutionary, structural and administrative technics that will provide in the present, as well as in the future, a quality of medical, nursing and hospital care never before possible in the entire United States, and for that matter, internationally, Sister Mary Miguel said.

4th Annual Industrial Health Symposium

A lunch served 10,000 feet over Denver, Colo., was a unique feature of this year's annual one-day symposium of the Industrial Health Committee of the Colorado State Medical Society, held Friday, May 8, at United Air Lines' Operating Base, Stapleton Airfield in Denver. Dr. Lewis C. Benesh, Chairman of the committee and District Medical Manager for United in Denver, arranged for a one and one-half hour scenic flight at noon in a United DC-7 Mainliner. Lunch was served aboard to the 40 physicians attending the symposium. The group is pictured above, just before boarding the airliner. Dr. Benesh also conducted the group on a tour of facilities at the operating base, control point of United's 14,000-mile, coast-to-coast system.

Obituaries

Aged civic leader dies in Burlington

Frank L. Bergen, M.D., of Burlington, died February 25, 1959. Dr. Bergen was born on April 23, 1877, in Edgar County, Illinois, and graduated from the University of Colorado Medical School after taking his premedic work at the University of Cincinnati. He served his internship in the Denver General Hospital and practiced in Burlington from 1907 to three years ago.

He served his community in many and varied capacities for the 50 years. He was City Health Officer, Past President of the Rotary Club, Past Master of the Main Lodge, and Knight Commander Court of Honor in Scottish Rite Masonry. He was Mayor of Burlington and he is survived by a son.

Noted internist passes away

Rollen Wayne Moody, M.D., of Denver, died on April 5, 1959. Dr. Moody was born in Conifer, Colorado, and attended the University of Colorado School of Medicine. He interned at Denver General Hospital and was licensed in Colorado in 1940. On December 20, 1943, he was elected to membership in the Denver Medical Society.

He was a brilliant internist and was on the staff of most of the Denver hospitals. He was an excellent teacher and many of the younger practitioners in the state will never forget him. He is survived by his wife, Theresa Moody (Miss Abel), and a son and daughter.

Elderly practitioner completes his work

George M. Noonan, of 261 South Williams Street, Denver, died on April 20, 1959. Dr. Noonan was born in Meadville, Pennsylvania, on February 15, 1880, and attended school in Pennsylvania. He first studied pharmacy and became a registered pharmacist. In 1906 he received his M.D. degree from the University of Pittsburgh. After an internship in Pittsburgh, he came to Colorado for his health and interned at Denver General Hospital.

He practiced in Walsenburg and resided there until 1945 when he retired and moved back to Denver. He was a Life Member of the Colorado

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State Medical Society and the American Cancer Society.

Survivors include his wife, a son and two granddaughters.

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PROGRAM

Monday morning, July 20

"Steroids Today"

9:00 — "Available anti-inflammatory steroids: chemical, biological and functional comparison," A. E. Leiser, M.D., Baylor University

9:30—"The use of anti-inflammatory steroids in rheumatologic disorders," J. W. Kemper, M.D., Baylor University

10:00—"Steroids in dermatology," H. D. Garrett, M.D., El Paso, Texas

10:30—Panel on "Complications and untoward reactions to the anti-inflammatory steroids." Panelists, A. E. Leiser, M.D., J. W. Kemper, M.D., moderated by Owen C. Taylor, Jr., Artesia, New Mexico

12:30—Luncheon and New Mexico AAGP Chapter business meeting

Tuesday morning, July 21

"Psychosomatic Medicine"

9:00—Topic to be announced, A. J. Leiser, M.D., Baylor University

9:30—"Psychosomatic rheumatism," J. W. Kemper, M.D., Baylor University

10:00—Topic and speaker to be announced

10:45—Panel on "Psychosomatic medicine." Panelists, Drs. Leiser, Kemper, Brown and Ford

12:30—Luncheon and question period for above four speakers

Wednesday morning, July 22

9:00—"Common fractures in general practice," Arthur Glassman, M.D., Baylor University

9:30—"Office gynecology," Stanley Rogers, M.D., Baylor University

10:00—"Diagnosis and management of kidney colic," Abel J. Leader, Houston, Texas

10:45—Panel on "Low back pain." Panelists, Drs. Glassman, Rogers, Leader and E. K. Neidich, Las Cruces, New Mexico

12:30—Luncheon and question period for above guest speakers

Thursday morning, July 23

9:00—"Management of orthopedic difficulties of the newborn," Dr. Glassman

9:30—"Evaluation of cephalo-pelvic disproportion," Dr. Rogers

10:00—"Management of urinary tract infection," Dr. Leader

10:45—Panel on "Orthopedic and urological complications in obstetrics." Panelists, Drs. Glassman, Rogers, Leader and Neidich

The presentations are made possible by a grant

To the relief of musculoskeletal pain, new MEDAPRIN* adds restoration of function

Analgesics offer temporary relief of musculoskeletal pain, but they merely *mask* pain rather than getting at its *cause*. New Medaprin, in addition to bringing about prompt subjective improvement, promotes the *restoration of normal function* by suppressing the inflammation that *causes* the pain.

Medaprin, Upjohn's new analgesic-steroid combination, contains aspirin plus Medrol,** the corticosteroid with *the best therapeutic ratio in the steroid field.*† Instead of suffering recurrent discomfort because of the "wearing off" of analgesics, the patient on Medaprin experiences a smooth, *extended* relief and more normal mobility.

Indications: Medaprin is indicated in mild-to-moderate rheumatic and musculoskeletal conditions, including rheumatoid arthritis, deltoid bursitis, low back pain, neuralgia, synovitis, fibromyositis, osteoarthritis, low back sprain, traumatic wrist, sciatica, and "tennis elbow."

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Supplied: In bottles of 100 and 500.

Formula: Each Medaprin tablet contains

- 300 mg. acetylsalicylic acid, for prompt relief of pain
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New Mexico elects new officers

Lewis M. Overton, M.D., Albuquerque, was installed as President of the New Mexico Medical Society on Monday, May 4, 1959, succeeding James C. Sedgwick, M.D., of Las Cruces, at the Society's 77th Annual Meeting. Other officers elected included Drs. Allan L. Haynes, Clovis, President-elect; William E. Badger, Hobbs, Vice President; and Thomas L. Carr, Albuquerque, Secretary-Treasurer.

The following physicians were elected to three-year terms on the Council: Robert P. Beaudette, Raton, and Wiliam R. Oakes, Los Alamos. Drs. Joe B. Norman, Hobbs, Richard M. Angle, Santa Fe, and Joseph H. Sharpe were elected to three-year terms on the Grievance Committee. Dr. Ezra K. Neidich, Las Cruces, was elected to fill the unexpired term of Dr. Hall on the Grievance Committee.

The House of Delegates voted to change the By-Laws of the Society to provide for a Speaker and a Vice Speaker for two-year terms. Elected Speaker of the House was Dr. C. Pardue Bunch, Artesia, and Vice Speaker, Dr. R. C. Derbyshire, Santa Fe.

Obituaries

LELAND S. SYCAMORE

Leland Schofield Sycamore, M.D., prominent Ogden physician and surgeon, died February 17 in an Ogden hospital of a heart ailment at the age of 42.

Dr. Sycamore married Mary Rae Christensen June 14, 1940, in the Salt Lake Temple, Church of Jesus Christ of Latter-day Saints.

He attended the University of Utah and the University of Tennessee and did his intern work at Thomas D. Dee Memorial Hospital in Ogden.

His memberships included the Weber County Medical Society, Ogden Surgical Society, Utah State Medical Association and the American Medical Association.

Survivors include his widow, two sons, three daughters, his mother, a brother and three sisters.

JOHN G. McQUARRIE

John Gray McQuarrie, M.D., 69, for more than 30 years a prominent southern Utah physician and surgeon, died March 1 in a Richfield hospital after a long illness. continued on 92

JUST 1 TABLET DAILY

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1. Editorial: New England J. Med. 258:48, 1958.
2. Vinnicombe, J.: Antibiotic Med. & Clin. Ther. 5:474, 1958.
3. Sheth, U. K., et al.: Ibid., p. 604, 1958.

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He graduated from the University of California Medical School in 1919 and practiced in Richfield from 1923 until illness forced his retirement several years ago.

Dr. McQuarrie had twice served as President of the Sevier County Medical Association and was a past Honorary President of the Utah State Medical Association.

An editorial in The Deseret News paid tribute to Dr. McQuarrie as follows: "The image of the country doctor is of the man with the black bag, setting out in all sorts of weather over back-country roads on missions of mercy to helpless patients. Dr. McQuarrie was all that and more. For 30 years, he covered a vast, largely-wilderness area of Utah, driving the 100 miles and more down into the Henrieville-Cannonville-Tropic country, over into Wayne County, around the mountain to Escalante. On several occasions, he rode horseback into Boulder and other inaccessible communities, changing to fresh horses along the way, Pony Express fashion."

Survivors include his father, his widow, three sons, two daughters, four grandchildren, six brothers and three sisters.

WILLIAM M. NEBEKER

William M. Nebeker, M.D., 61, noted Salt Lake City obstetrician and gynecologist, died March 28 at his home of natural causes.

Dr. Nebeker was born February 19, 1898, in Willard, a son of Peter A. and Esther Owens Nebeker. On September 20, 1923, he married Helen Clyde in Springville.

He served in the U. S. Marine Corps during World War I, was graduated from the University of Utah and received his M.D. degree from the Northwestern University College of Medicine, Chicago. His residency training was taken in Buffalo, New York. From there he came to Salt Lake City and joined the Salt Lake Clinic. Later he established offices in the Medical Art Building.

He was one of the first members of the American Board of Obstetrics and Gynecology and had been chairman of the Medico-Legal Committee of the Utah Medical Association for ten years. In addition he was a member of the Liaison Committee of the Medico-Legal Department of the American Medical Association and was a member of the American College of Surgeons. He was an associate clinical professors of the College of Medicine at the University of Utah. He retired from active practice in 1958.

Survivors include his widow, two sons, a daughter, three grandsons and a granddaughter.

SOCIETY PROCEEDINGS

House of Delegates
Second Interim Meeting

March 25, 1959
Salt Lake City, Utah

The House of Delegates of the Utah State Medical Association was called to order at 9:20 o'clock a.m. by the Speaker of the House of Delegates, Drew M. Peterson, who reported a quorum present.

The minutes of the 1958 session of the House of Delegates were approved as printed in the Rocky Mountain Medical Journal.

Speaker Petersen introduced Dr. U. R. Bryner, President of the Utah State Medical Association.

President Bryner: Dr. Petersen, members of the House of Delegates, I have very little to add to my report. I would like to call your attention to one or two things that are coming up in the very near future that are rather important to our Society and the Western group of states. I would like to compliment Dr. Stevenson and Dr. Hicken and Mr. Bowman and others who worked hard in the Legislature for passage of the Basic Science bill which now has been signed by the Governor. It is not exactly what we wanted but certainly it is a big step forward.

In the very near future we are going to have

a medical-legal conference involving the Western States in Salt Lake City, April 18 and 19. Today at noon you are going to hear from Mr. C. Joseph Stetler, who is Director of the Law Department of the American Medical Association. He will be here for the Medical-Legal Conference which will be a very important meeting. We are to have some very fine speakers and I urge all of you who can to register for these meetings.

On May 8 and 9, we are having a conference on problems of the aged. This is a very important subject and a very important problem. The meeting involves the Western States, and will have many fine speakers from Headquarters and other places. Those of you who are interested, and who can, should attend those meetings. You will get further notice on the program, I am sure.

I wish you success in today's deliberations.

A letter from Dr. George F. Lull was read:

Dear Dr. Bryner:

On behalf of the American Medical Education Foundation, we wish to express our indebtedness to the Utah State Medical Association for its gift of $9,977.50 to our medical schools.

In their grateful acceptance of your gift, the Board of Directors has requested that I convey their deepest appreciation for your support.

Most sincerely yours,
George F. Lull,
President of A.M.E.F.

Report of the Secretary

Speaker Petersen: The next order of business is the report of the Secretary, J. Poulson Hunter.

Dr. Hunter: The report of the Secretary and Scientific Program Committee is printed on pages 15 and 16 of your Handbook. There are no additions. I would like to comment, in reading the report, we invite you to develop some enthusiasm for your state meetings. We feel that they are going to be of high caliber for your benefit. Invite any of your colleagues from neighboring states. We invite your participation and we hope that the programs will come up to your expectations.

Report of the Treasurer

Speaker Petersen: The next order of business is a report from the Treasurer.

Dr. Dalrymple: We have no additional report at this time. As you know, our annual report will be made in the fall. Your books are being audited at the present time and I think they are in good shape. I refer you to page 14 where you can learn about our new building, which I am sure you will see today.

Report of the Delegate to the A.M.A.

Speaker Petersen: The next report is the report of the Delegate to the American Medical Association.

Dr. Castleton: Before proceeding with the brief discussion of my report, I would like to step aside from my role as A.M.A. Delegate for just a moment and pay tribute to the members of the Utah State Medical Association for the wonderful support that you have given the University of Utah Medical Center Drive. This drive has been carried

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out over the past few weeks despite some apathy and some active opposition. The first was largely resolved by meetings, discussions, answering criticisms, and correcting misinformation or supplying more information. The over-all drive has been extremely successful. It is my pleasure to announce for the first time that we have reached our quota of $600,000. In fact, we have exceeded it. This is extremely gratifying to be able to render this report. I feel that this is one of the most valuable public relation projects that could have been accomplished by the medical profession because this drive has been watched very closely by a great many people, including civic leaders, political leaders, and industrial leaders. We are getting a great deal of favorable publicity because of your great cooperation.

Speaker Petersen: I would like to interrupt here because I think Ken deserves a rousing applause from this body for a job well done. He has put in a tremendous amount of time on this particular project.

Dr. Castleton: I feel this is not a personal triumph for me but a triumph for the doctors of this state and again I would like to express my sincere thanks and again congratulate you for your wonderful cooperation.

Free choice of physician

One of the most important things that we must do today is to get an expression from this House of Delegates regarding two questions which have been posed by the A.M.A. regarding free choice of physician. I have abstracted from the Report of the Commission on Medical Care Plans as published in the Bulletin. I would like to point out that this is a very brief summary of this report despite the fact that it seems very lengthy to you. It is an abstract of a summary of an abstract of the Report. The Report itself is a large two-volume affair. It was printed as a special edition of the Journal of the A.M.A. dated January 17 which you all received. I have gone through this report numerous times and have abstracted it and taken what appears to me to be the most salient features. Now, in so doing, I realize there is a certain danger to such a procedure. I realize that some of you in abstracting may not have done it quite as I have done. Perhaps you would disagree with my method of abstracting it, but I have tried to do it as fairly and objectively as possible. The reason that this is of great importance now is because as Delegate to the A.M.A., I am obliged to send a report to the Headquarters of the American Medical Association 60 days before the next session of the House of Delegates which is scheduled June 8 to 12, indicating the desire of the members of the Utah State Medical Association regarding these two questions.

The last Bulletin publishing my summary indicated at the end of the report a method of voting on these two questions. Actually this wasn't properly done and I assume full responsibility for it. The second question cannot be answered yes or no. I would like to read these questions now. It was our original plan to try to get replies from as many members as possible in order to formulate the basis for a reply to the A.M.A. So far, we have received only about 10 replies from members of the Association. Therefore, I think it behooves this body to take some formal action today as a guide to my report to the A.M.A.

The questions are as follows, on the free choice of physicians: *Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertable, unalterable, and essential to good medicine without qualification?*

Now that question can be answered yes or no.

Second question is on closed panel health care plans: *What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physicians?*

Obviously that question cannot be answered yes or no. I hope that sometime before we close our deliberations today, a motion will be made from the floor expressing the attitude of this body on those two problems. I imagine that many of you will have questions which I will attempt to answer.

As I see this problem, it isn't a matter of whether we favor free choice of physician as such.

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I think we all favor that. The problem is stated in the first question: "Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertable, unalterable and essential to good medicine without qualification?"

There are many aspects of this thing that I think might well be pointed out and, as I say, I don't think it is a question of whether we endorse the principle of free choice of physician (I think we all do that), but whether we should endorse it in a rigid form or whether it is subject to modification.

Speaker Petersen: It would be wise for you to be at the reference committee meeting and help them by giving your views on it. When the reference committee reports on this question later today, ample opportunity will be provided for discussion from the floor.

Report of the Auxiliary

Speaker Petersen: Mrs. Erma Gottfredson, President of the Woman's Auxiliary.

Mrs. Gottfredson: I should like to express the appreciation of the Woman's Auxiliary for the opportunity to report its activities.

We are most grateful for the annual grant which enables us to work much more effectively than in the early years of the Auxiliary. Your confidence in us stimulates our desire to serve the Medical Association so well that you will believe at all times that we honestly earn the money and that it is well spent.

The Medical Auxiliary is not just another social club, but exists for serious purposes:

1. To assist the Medical Association in its program for the advancement of medicine and public health.
2. To cultivate friendly relations and promote mutual understanding among physicians' families.

Speaker Petersen: I don't know whether we all appreciate or know what our Medical Auxiliary does, but there is a lot of work that goes on behind the scenes and also on the stage that I am sure most of us don't see and I think that they really do a terrific job for us and I am sure that I express the feelings of all of us when I thank them wholeheartedly.

Report on polio vaccine

At this time I would like to call on Dr. Jenkins from the Utah State Department of Public Health.

Dr. Jenkins: Perhaps there was never a better time to encourage people to receive the polio vaccination through their family physician in his office as at the present time because we know of the interest of the medical groups, and the most important as far as I am concerned are the American Medical Association and the State Medical Association.

The House of Delegates of the American Medical Association passed unanimously three main points and they are briefly that State Medical Associations and State Health Departments get

together in a joint venture to promote immunization against polio through working with county or component medical societies and the local health departments to determine what their problems are and to promote vaccinations as much as they can and then for every physician to do everything that he can to see that the members of the families that he is taking care of receive the polio vaccination. There are many other groups, of course, interested in this program, such as the American Academy of Pediatrics and the United States Public Health Service.

I mentioned the American Academy of Pediatrics, the National Foundation — anyway, the American Medical Association and others have secured again this year the services of the National Advertising Council to encourage polio vaccinations. Perhaps you have already seen or heard over the radio or television educational messages urging people to see their family physician and receive this protective vaccination.

Utah first

I should say at this point that the Utah State Medical Association and the physicians of the state are to be highly commended for the very fine job they have done on the polio vaccination, not only at the present time but in the past, and you should know that as a result of your work and your efforts, in 1957 Utah ranked first of all states in polio vaccination based on the vaccine received in Utah and the population.

A recent polio vaccination survey completed in Salt Lake County, covering about 500 families in the county only, indicated that 53 per cent of them had received three or more injections of polio vaccine. Of course, we know that a lot of them have already been vaccinated and no doubt many others still should receive the third injection to protect them against this disease. The last major outbreaks occurred in Utah in 1951 and 1952. Anything the State Health Department can do to help the State Medical Association in this program we will be glad to do, and we will welcome your suggestions and recommendations.

Speaker Petersen: Before proceeding with new business, we have two committee reports which are not in the Handbook. I call on the Chairmen of these two committees for their reports.

Report of the Committee on Maternal Mortality

Dr. Woolsey: The purpose, organization, and functions of the committee have been discussed and a framework set up to start the business of the committee.

The purpose of the Committee on Maternal Mortality of the Utah State Medical Association shall be to determine by scientific and confidential analysis of all factors in maternal deaths in order

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Organization cont. from 100

that (1) avoidable factors in maternal death may be reduced or eliminated and (2) better maternal care may be assured through improvement in teaching and practice.

The definition of terms are basically those used in the A.M.A.'s "Guide for Maternal Death Studies."

The framework is so set up as to comply with and make use of the "Standard Nomenclature of Disease and Operations" and "The International Statistical Classification."

The functions of the committee shall be: (1) case finding; (2) collection of data; (3) processing of data; (4) review of cases; (5) utilization of information.

We would particularly urge your attention to and cooperation with this committee and its functions. Please make the existence of this committee known to all members of the Society. It should be stressed that all data are for information only. This committee is not interested in nor has it any punitive powers. The strictest confidence is to be maintained and the physician and patient will be anonymous.

Many problems are still being worked out, but we feel that we are sufficiently organized to start collecting data.

Report of Committee on Medical Education and Hospitals

Speaker Petersen: Dr. Philip Price, Dean of the University of Utah School of Medicine, Chairman of the Committee on Medical Education and Hospitals.

Dr. Price: Because of the widely scattered membership and since no specific matters have been referred to it, this committee did not meet until last evening when members were gathering for this Interim House of Delegates Meeting. The following is a summary of the deliberations of this committee.

1. Standards of hospitals is a proper area of concern for this committee. It endorses the principle of highest possible standards of professional care for all citizens and hospitals in Utah. To that end it recommends:

(a) That through the State Association office an accurate, authoritative and up-to-date collection of regulations and standards and other pertinent information set forth by the Joint Board on Hospital Accreditation and other accrediting agencies be assembled and be made available to hospitals of the state desiring such information.

(b) That the Association office also attempt to assemble information obtained from individual hospitals of the state regarding rules, regulations, organizations and so on under which they operate. It is hoped that such information freely contributed and made readily available to others will assist in meeting individual organizational problems in raising the general level of efficiency and standards of medical care and in facilitating efforts of those institutions which have not already done so but desire to seek official accreditation.

2. After some discussion of the advanced defect practice and educational value of preceptorships, the committee recommended that the College of Medicine be requested to give serious consideration to the use of preceptorships as one phase of undergraduate medical education.

3. The problem of lack of adequate medical service in certain isolated areas of Utah and the responsibility of the State Medical Association, College of Medicine and of the communities themselves in meeting the problem were discussed. It was felt that the plan of having the State Association provide a scholarship for a medical student who would then be obligated to work off that debt in a designated service was a step in the right direction but that the present plan contains many serious defects. The committee therefore recommended that a re-study be made of the problem of supplying isolated communities of the state with the idea of putting it on a more satisfactory basis, particularly in the direction of bringing the community itself more actively and responsibly into the picture and of establishing more cordial relations between the student concerned and the community.

4. The committee spent some time discussing the predicted shortage of practicing physicians in the United States and particularly in the Western states due to the fact that medical schools are not at present keeping pace with the explosive increase in population. Federal agencies, the A.M.A., the Association of the American Medical Colleges, the Western Interstate Commission on Higher Education and other organizations studying the problem anticipate that this shortage of medical personnel will be felt more acutely as the years pass. Although the committee is not prepared to take any specific stand at this time or make any recommendation in this regard, it does take cognizance of the problem, particularly as it may affect Utah, and it will continue to do so in future meetings.

Dr. Petersen: Dr. Stanley Child has a matter of business that we feel should come before the House at this time.

Necrology Committee report

Dr. Child: I have been asked to give the report of the Necrology Committee by Dr. Joseph Morrell in his absence. Letters of sympathy and condolence have been sent to the families of each of the following members of the Utah State Medical Association who have passed away during the year:

C. A. Nyvall, M.D., Salt Lake
Leland S. Sycamore, M.D., Ogden
Paul S. Richards, M.D., Salt Lake
Hugh O. Brown, M.D., Salt Lake
William T. Ward, M.D., Salt Lake
Gordon M. Jensen, M.D., Logan
Harry O. Frazier, M.D., Salt Lake
J. R. Llewellyn, M.D., Salt Lake
J. G. McQuarrie, M.D., Richfield

Each member of the Association joins this committee in their deep feeling of sympathy to the respective families of these doctors. Respectfully submitted, Joseph Morrel, M.D., Chairman.

Mr. Speaker, I move that we stand in a moment of reverence and silence in honor of these deceased members.

(House of Delegates stood as a body in silence.)

Speaker Petersen: Before introducing any fur-

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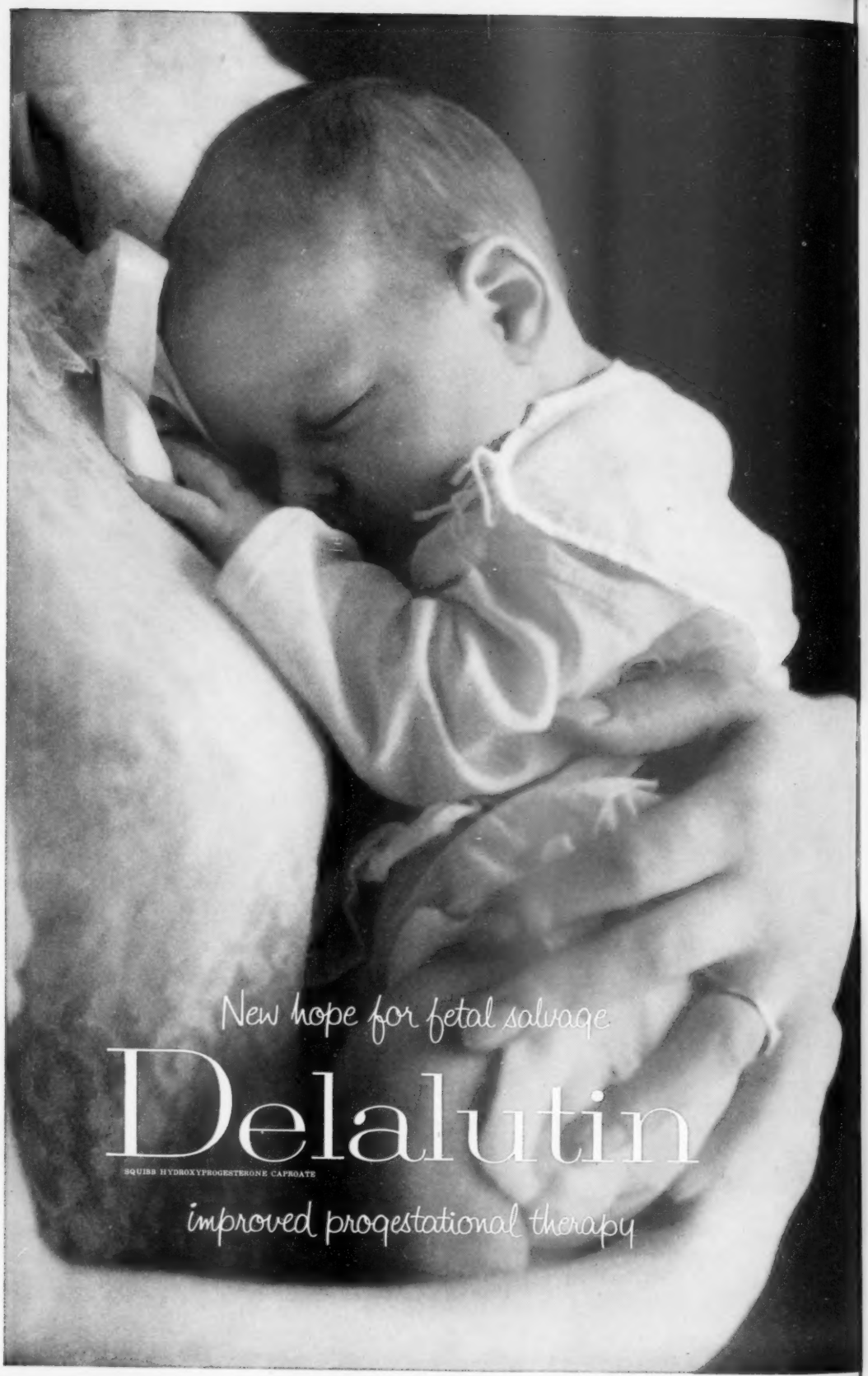

New hope for fetal salvage
Delalutin
SQUIBB HYDROXYPROGESTERONE CAPROATE
improved progestational therapy

The results of administering Delalutin before the 12th week of gestation to 82 women with habitual abortion were reported recently by Reifenstein.[1] Every patient had experienced at least three consecutive abortions immediately preceding the treated pregnancy. More than 68% of these women were delivered successfully and uneventfully following Delalutin therapy.

Boschann,[2] in a study of pregnancies with threatened abortion, found that:

37% of 73 pregnancies were carried to term without progestational therapy
64% of 42 pregnancies were salvaged by progesterone
83% of 73 pregnancies were salvaged by Delalutin

Eichner,[3] found that with Delalutin fetal salvage of infants below term weight (1000 to 2000 gm.) was significantly improved.
108 (76%) of 142 babies of this birth weight survived without progestational therapy.
16 (100%) of 16 babies of this birth weight survived with Delalutin therapy.
A comparison study was made of a group of repeated aborters treated with Delalutin, and a group with a similar history treated with bed rest and sedation.[4] Pregnancy salvage with Delalutin was twice that of the control group. Delalutin was found to be "highly active," well-tolerated and long-acting.

Delalutin offers these advantages over other progestational agents:

- longer-acting and more sustained therapy
- more effective in producing and maintaining a completely matured secretory endometrium
- no androgenic effect
- more concentrated solution requires injection of less vehicle
- unusually well-tolerated, even in large doses
- requires fewer injections
- low viscosity makes administration easier

DELALUTIN is also potent and safe therapy for: threatened abortion; postpartum after-pains; amenorrhea, primary and secondary; dysfunctional uterine bleeding not associated with genital malignancy; infertility with inadequate corpus luteum function; production of secretory endometrium and desquamation during estrogen therapy; premenstrual tension; dysmenorrhea; cyclomastopathy, mastodynia, adenosis and chronic cystic mastitis.

Administration and Dosage: Because of its low viscosity, Delalutin may be administered with a small gauge needle (deep intragluteal injection). Complete information on administration and dosage is supplied in the package insert.

Supply: Delalutin is available in vials of 2 and 10 cc., each cc. containing 125 mg. of hydroxyprogesterone caproate in sesame oil, and benzyl benzoate.

References: 1. Reifenstein, E. C., Jr.: *Annals N. Y. Acad. Sci.* 71:762 (July 30) 1958. 2. Boschann, H-W.: *ibid.*, p. 727. 3. Eichner, E.: *ibid.*, p. 787. 4. Hodgkinson, C. P.; Igna, E. J., and Bukeavich, A. P.: *Am. J. Obst. and Gyn.* 76:279, 1958.

SQUIBB *Squibb Quality—the Priceless Ingredient*

'Delalutin'® is a Squibb trademark

Organization cont. from 105

ther resolutions to the House, I would like to read a resolution which is entitled: Resolution 11, introduced by Council. The subject is George R. Aiken, M.D. I do not think it is necessary to refer this to a committee.

WHEREAS, Medical legislation is increasing both locally and nationally, and

WHEREAS, There is growing need for physician participation in legislative, civic, and community affairs, and

WHEREAS, George R. Aiken, M.D., of Kanab, Utah, responded to this need when he ran for and was elected to the office of State Representative, and

WHEREAS, Dr. Aiken served his state and the people with modesty and distinction, and

WHEREAS, Dr. Aiken performed this service at a sacrifice to himself; now, therefore, be it

RESOLVED, That the House of Delegates of the Utah State Medical Association commends Dr. Aiken for this service and hopes that his leadership will serve as an ideal for other physicians to follow; and be it further

RESOLVED, That a copy of this resolution be forwarded to Dr. Aiken.

Resolution approved.

Speaker Petersen: I would like to interrupt the proceedings at this time to introduce to you two outstanding gentlemen. Dr. George Fister, member of the Board of Trustees of the American Medical Association.

And Mr. C. Joseph Stetler, Director of the Legal Department of the American Medical Association.

Meeting adjourned until 2 p.m.

Reference Committee reports

Speaker Petersen: The first order of business will be the report of Reference Committee Number One on Reports of Officers, Dr. George H. Curtis, Chairman.

Dr. Curtis: The first report we are considering is that of Dr. Ken Castleton, Delegate to the A.M.A. This report is in two sections. The first section consists of the reports of the various speakers and the second section takes in the discussion of more specific problems.

Dr. Gundersen, in his speech as President of the A.M.A., brought out two important principles. The first has to do with something we will be discussing here during our afternoon. He suggested that we should fight hard for our basic principles but that we should be adaptable to the changing times. In other words, don't be rigid in all these old principles that we have but that we sometimes must change them according to the things that are going on in the present day. He brought out the point that there are three large challenges facing the A.M.A. at the present time.

Geriatric health care

First, the Health Care of the Aged; second is the Third Party Problem that we have been discussing, and third is support of Medical Education.

Governor Freeman of Minnesota brought out some good points in his speech before the A.M.A. House of Delegates in Minneapolis, namely that the aged population of those over 65 in the next few years will increase by 35 per cent, whereas the productive group who are paying the taxes and doing all of production will increase by only 9 per cent. He again urged the doctors to find some solution to these problems before Congress has to do it for them.

The A.M.A. hopes that each of the component State Societies will take some initiative in producing plans whereby the doctor will accept less and in so doing allow insurance companies to insure these oldsters for a smaller premium. These proposals have been sent to the various societies.

Third party medical practice

The next part of our report is the important problem Dr. Castleton told you about this morning. He would like answers to two specific questions from our Society which should be sent to the A.M.A. within 10 days for consideration by the A.M.A. House of Delegates at its June meeting. This first is the problem of Free Choice of Physician. As you know, it has always been the policy of the A.M.A. that the individual patient should have free choice of physician, and the question now is whether there should be a rigid rule with no exceptions or whether there should be allowances made in the principle of free choice of physician. We know, at the present time, there are many instances where the patient does not have free choice of physician, such as in the Veteran's Administration, County Hospitals, the United Mine Workers Plans, many industrial plans, some of the public health work and in many others. This is going on at the present time and it is likely to increase as time goes on. At the present time there are many parts of our population who do not have free choice of physician and, yet, they are getting good medical care in these various institutions and plans.

We are going to be asked to vote on this problem and I want you to be thinking of it as I am proceeding with the rest of our report. Times are changing and we feel that sometimes we must be more flexible in our policies on this one problem of Free Choice of Physician.

The other point as it is constituted in this report, if you voted "yes" on this question it would mean that you were against all the physicians in these various organizations and hospitals and institutions that give care to these patients. If you cannot vote "yes" without being against all this other group and if you vote no, that means you allow all exceptions at the present time. This proposal has been considered in various County So-

cieties in the state and the problem isn't a thing you can vote yes or no on the way it is asked here. At the end of my report I will propose a new form so that we can get a better idea of how you stand on this question.

The next question considered in this report was that of Closed Panel Systems. The problem is, what should our attitude be toward the physician who works in a closed panel such as some of the industrial plants, Permanente and many others where the physician is paid a salary and takes care of the patient for a fixed salary and the patient has no free choice of physician, so to speak? I think there are three things that should be brought up here.

In the first place, most of these closed panels or these institutions do give good medical care. Underlying all of our considerations should be the basic proposal that the patient comes first. We should always consider the patient first and our own desire and feelings second. So, therefore, we should ask ourselves, in thinking of this closed panel proposal, if the patient is getting good care and how strict should we be or should we censor the physician who is giving this care, so long as he is giving good medical care to the patient?

The rest of our report deals with the other facets of the national problem on Medical Care Plans which will be discussed later. The old problem of osteopathy comes up again and the A.M.A. is still having committee meetings and reports on this problem. It will come up for consideration again in June, 1959.

Medical education

The A.M.A. is again urging physicians to try to do all they can to encourage establishment of new four-year medical schools and improving the facilities of the schools we have at the present time.

The A.M.A. has reorganized on an administrative basis into seven divisions.

Fund raising

The A.M.A. wants to go on record as being neither for or against the question of various health agencies joining United Fund or not joining United Fund. They want to be sure that all concerned are aware that the A.M.A. has no national policy on this question.

There is one correction in the printing of this program which I will give to the Secretary later. On page 8 the sentence that starts with: "Thus proportionately fewer people—" and so forth, should be corrected to read: "Thus proportionately fewer people in the productive and tax-paying years will have to provide for greater educational services for the increasing number of children and greater social and medical care services for the increasing number of the aging population."

Report accepted

It is the recommendation of this reference committee that we accept the excellent report of Dr. Castleton with this one correction.

Free choice

At this time we should discuss the two proposals previously mentioned and vote on them. I would like to propose that on the Free Choice of the Physican proposal that we vote on this question: *That the Utah Medical Association believes in the basic principle of Free Choice of Physician but feels that this cannot be strictly adhered to in certain situations such as I have mentioned before.*

The second proposal is the question on Closed Panels and I feel we should vote on this wording: *The Utah State Medical Association feels that a physician participating in a closed panel should not be censured so long as he is providing adequate medical care for the individual patient.*

First, we are voting on the Free Choice of Physician: *"The Utah State Medical Association believes in the basic principle of Free Choice of Physician but feels that this cannot be strictly adhered to in certain situations."*

Thereupon a vote was taken and the motion was carried unanimously.

Dr. Curtis: *"The Utah Medical Association feels that the physician participating in a closed panel should not be censured so long as he is providing*

adequate medical care for the individual patient. The Utah State Medical Association also believes that the closed panel should incorporate the idea of free choice in the patients of a physician."

Much discussion followed presentation of this proposal.

Speaker Petersen: We'll let Dr. Curtis carry on with the rest of the report of his reference committee and we will come back to this question after the second reference committee has reported.

Dr. Curtis: The next report is on page 12 of the Handbook and is the report of the President of the Utah State Medical Association. Dr. Bryner reported on plans for the Aging Conference; told of his monthly Council meetings; and encouraged everyone who can to attend the Medical-Legal Conference April 17 and 18. He informs us of the research being done by the University of Utah Bureau of Economic Research on a study of the aging problem. Our committee feels that the report of the President be accepted.

The motion was voted on and accepted.

The report of the Secretary and the Chairman of the Scientific Program Committee on page 15 of the Handbook announced the program for the State Medical Association meeting, September 16 to 18. I move this report be accepted.

The motion was seconded and accepted.

The next report is that of the Executive Secretary on page 17 of the Handbook. He covers many of the items we have been discussing. We move that this report be accepted.

The motion was duly seconded and accepted.

Report of Woman's Auxiliary

The next report is that of the Woman's Auxiliary on page 22 of the Handbook. We applaud the Woman's Auxiliary for the excellent work they have done and we move this report be accepted.

The motion was voted on and accepted.

The last report is that of the Advisory Committee to the Woman's Auxiilary on page 33 of the Handbook, by Dr. Bryner. It mentions their work with the Woman's Auxiliary and the efforts they are making trying to arrange for a sum of $5,000.00 which will be loaned to needy medical students. They were happy to have their office in the new headquarters. We move that this report be accepted.

The motion was voted upon and accepted.

Reference Committee Number Two

Speaker Petersen: Report of Reference Committee Number Two on Legislative and Public Relations Matters, Dr. John A. Dixon, Chairman, of Ogden.

Dr. Dixon: This committee considered 15 committee reports and one resolution, so of necessity our comments will be brief, but we will try to get the information across as far as possible.

continued on next page

Aging

The report of the Aging Committee, on page 19 of the Handbook, has been reviewed by the committee. I move that on behalf of the committee that the report be approved as written.

The motion was accepted.

Public Welfare

The report of the Medical Advisory Board to the Utah State Department of Public Welfare Committee on page 21 of the Handbook was reviewed. This report and its recommendations have been reviewed and have been approved by the committee. It is our recommendation that this report be approved with the additional suggestion that all members of this group and medical societies take an active and direct interest in this problem. The committee feels this is where we are coming to grips with governmental medicine in its most open form and that further invasion in this field will be to the aspects of the public welfare and recommend the utmost use of the Advisory Committee to the local welfare county groups. This is a motion then that this report be approved.

The motion was voted on and accepted.

Public Health

The third report considered is that of the Public Health Committee. This is found in your Handbook on page 26. This report has been reviewed and it is the recommendation of the committee that it be approved as written and I would like to so move.

The motion was voted and accepted.

School Health

The fourth report is that of the School Health Committee which is found on page 26. This report has been reviewed and it is the recommendation of the committee it be approved and we so move.

The motion was voted upon and accepted.

Sewage and Water

The fifth report considered is that of the Sewage and Water Pollution Committee on page 27 of your Handbook. It appears there is some very fine work being carried out in this field. The committee moves that this be approved as written.

The motion was voted upon and accepted.

The sixth report is that of the Rural Health Committee found on page 29 of the Handbook. It has been reviewed. The committee would like to mention that Dr. Branch, who was present at our hearing, noted the establishment of two-year residencies in psychiatry for general practitioners, which it is hoped will meet some of the problems in mental health which exist in the rural areas as well as in urban areas. We move the approval of this report with this additional information.

The motion was voted upon and accepted.

The Newspaper Health Column Committee report on page 30 of your Handbook has been reviewed and its approval recommended with the following appended consideration.

It was felt and concurred with by a number of members of our Public Relations concern that great consideration should be given to the establishment of local newspaper Health and Publication Committees whose purposes would be reviewing joint fields of interest, giving advice on news articles and release of news articles relative to medical activities. We take some pardonable pride in saying that we found this means to be very effective in some of the problems that came up. The committee recommends approval of the report.

The motion was voted upon and accepted.

Hospital Relations

The eight report considered was that of the Hospital Relations Committee which is found on page 35 of your Handbook. This report has been reviewed by the committee and it is our recommendation that it be approved as written, and I so move.

The motion was voted upon and accepted.

TB and Cardiovascular

The tenth report is found on page 37 of the Handbook. It is that of Tuberculosis and Cardiovascular Committee. This report has been reviewed and the committee moves its acceptance as written.

The motion was voted upon and accepted.

Industrial Health

The Industrial Health Committee report has been reviewed. The suggestion has been made that in connection with some of the companies that Blue Cross-Blue Shield be instructed to meet and cooperate with these individuals in any way possible and in formulating plans which provide for free choice of physicians and free medical care on these other policies. It is the comment of the committee likewise that they feel that further protestations of righteousness in the field of panel medicine and free choice of medicine is relatively

meaningless unless many of the established panels and other situations are broken up and all such things are disbanded so that real free choice of physician with punitive measures to handle those who do not conform to the general activities of the medical society be established. In other words, if we believe in righteousness we had better do something about it.

The motion was voted upon and accepted.

Veterans Affairs

The next report is that of the Veterans Affairs Committee found on page 39 of the Handbook. This report has been reviewed and we move that it be accepted as written.

The motion was voted upon and carried.

Liaison Committee

The next report is that of the Liaison Committee with the Utah Bar on page 44 of the Handbook. This report has been reviewed and its approval recommended with the suggestion that consideration be given to combining this in some manner with the Medical-Legal Committee. It was felt by some of the members present that while there is some difference in their activities, that the Liaison Committee is to establish better relations and understanding, whereas the Medical-Legal Committee deals more with specific cases; that perhaps in some respects they should have more close coordination and not be individual committees. In other words, the possibility of a subcommittee, one or the other, be considered. We move the report be approved.

The motion was voted upon and accepted.

Legislative Committee

The fourteenth report, which you do not have in your hands and which has not been read, is that of the Legislative Committee. It was referred to us. It essentially consists of recognition of those who have taken part in the activities on behalf of passage of the Basic Science Law. We would like to read excerpts of it.

"Credit for this achievement must go to the joint efforts of the entire Society and the Auxiliary. To Dr. U. R. Bryner, our State President; the Executive Council; Executive Secretary, Harold Bowman; Dr. N. F. Hicken, Chairman of the Salt Lake County Legislative Committee, and members of the State Legislative Committee; Mrs. Irma Gottfredson, President of the State Society Auxiliary; Mrs. Margo Poulson, Chairman of the State Legislative Committee Auxiliary; all members of the State and County Legislative Committees and the Evans agency, a grateful thank you, for tireless work and devotion to a dedicated cause."

While the committee did not feel a formal motion to the effect that we certainly appreciate the efforts of all these people was in order in our committee report, we certainly did want to recognize this activity as we feel it is a very salient achievement. Notice is taken in the committee report that individual congratulations have been given to the Legislators who supported us.

A welcome amendment to the Basic Science Bill came during the last day of the Legislature when the dental profession was included among those in the healing arts re-

quired to take the examination. With a future amendment to the bill, a member of the dental profession will greatly strengthen the Basic Science Board.

The Medical Society would have preferred Examining Board members to be professors from the state schools of higher learning in Utah but following a caucus by our sponsors in the Legislature, found this to be impossible. The present board will be comprised of five members consisting of a member of the Attorney General's staff acting as Chairman, one member from the Medical Society, one osteopath, one chiropractor and one naturopath. We propose and recommend the law be amended at the next session of the Legislature to add a member of the dental profession to the board. We feel confident that the full intent of the Basic Science Law will be accomplished.

It is with regret that your committee could not give more time and assistance to the multiple other medical legislative problems, including the Medical Examiners Bill which remained in the House Sifting Committee without action. This bill should be placed high on the agenda of the next session of the Legislature along with the proposed Psychiatrists Bill which did not get out of the Sifting Committee.

In order to approve this report we have to delete part of the first sentence which reads: ". . . and only awaits the Governor's signature." This brings up to date the report and the committee moves approval.

The motion was voted upon and accepted.

Maternal Mortality

The report of the Committee on Maternal Mortality was read previously and is essentially the undertaking of a study to reveal data in maternal deaths; how they may be reduced and how better maternal care may be assured through improvement in teaching and practice. The committee moves approval of this report with the request that all component societies and members of the Society assist this committee in all manner possible in this important undertaking.

The motion was voted upon and accepted.

The other portion of business consisted of consideration of Resolution Number IV of which you all have a copy. A great deal of time of the committee was spent in discussing this proposition and the reasons. Without editorializing too much, I will just state briefly what the feelings of the President and the committee were and our recommendation. The committee moves that the resolution not be approved.

The motion was approved.

Speaker Petersen: I would like to call Dr. George Curtis, Chairman of Reference Committee Number One, to give us the final wording on the practice in closed panel systems.

Dr. Curtis: This is the latest attempt of Dr. Castleton and myself: *"The Utah State Medical Association recognizes that under proper conditions, third party medicine, contract practice and closed panel medicine as such are legal and ethical. However, we feel that the American Medical Association should make every effort to control this type of practice so that it will remain in keeping with the highest traditions of our profession. We urge that every effort be made to establish a good liaison between such groups and other practitioners in the area involved and that the choice of physician be incorporated in these plans so far as possible. We would urge caution in any disciplinary measures directed toward those involved in this type of practice provided they are rendering a high type of medical care and are otherwise conforming to accepted ethical standards."*

Much discussion ensued.

Speaker Petersen: Mr. Bowman would like to speak to this.

Mr. Bowman: I think, gentlemen, the situation is covered in the first part of Dr. Curtis' report and I believe we are getting fouled up a little bit and I don't believe it is necessary that we answer number two and I think if Dr. Curtis would read the first part of his report, I think it would cover the situation; the first recommendation that was passed.

Dr. Curtis: The first recommendation was on the free choice of physicians. The one we voted on originally and we passed was on the free choice of physician and that was that the Utah State Medical Association believes in the basic principle of the free choice of physician but feels that this cannot be strictly adhered to in certain situations, and we passed that.

Then the original on the closed panel was this: The Utah State Medical Association feels that the physician participating in a closed panel should not be censured so long as he is providing adequate medical care for the individual patient.

The motion was voted upon and approved.

Reference Committee Number Three

Speaker Petersen: We now come to Reference Committee Number Three on Professional Relations and Miscellaneous Committees, Dr. John H. Bowen, Chairman.

Dr. Bowen: I didn't know there were so many problems facing this committee. With all members present, we debated and discussed the various reports. First report under consideration is that of the Medical Education and Hospital Committee submitted this morning by Dr. Price. In essence, this committee stated roughly three things; they wish to have the State Medical Association check up-to-date regulations and standards and pertinent information set forth by the Credentials or Accreditation Boards of hospitals to have this in-

formation readily available for the new hospitals who are interested in becoming accredited.

The second point of information was the problem of lack of adequate medical care service in outlying areas. Then this problem of education, of those interested in general practice type of set up with the preceptorship being inaugurated with the medical schools.

The third point of information was the predicated shortage of practicing physicians in Utah, particularly in the western areas. The report of Medical Education and Hospitals Committee was thought to be a good report and we approve it and make a motion that this report be accepted as read.

The motion was voted upon and approved.

Medical Service Bureau

The second report is that of the Medical Service Bureau Committee, signed by Dr. Paul A. Clayton, Chairman. This committee report is found on page 24 of the Handbook. The committee reviewed this report and wished to add a vote of confidence to Mr. Lewis G. Hersey for valuable contributions through the Medcial Service Bureau. I move this report be accepted as read.

The motion was voted upon and accepted.

Grievance Committee

The third report is that of the Grievance Committee, page 25 in the Handbook, submitted by W. E. Peltzer, Chairman. This report was read by our committee and I move it be accepted as printed.

The motion was voted upon and approved.

Medical Economics

The fourth report is that of the Medical Economics Committee, page 25 in the Handbook. There has been much going on here. We move we accept this one.

The motion was voted upon and accepted.

Joint Nursing Resources

The next report is that of the State Joint Nursing Resources Committee on page 37 of the Handbook. We felt this to be an excellent report.

We accept the report and add a word of encouragement to the committee to continue its active research in this problem. We move that this report be accepted as written.

The motion was voted upon and approved.

Child Adoption

The next report is the report of the Child Adoption Committee, page 44 of the Handbook, presented by L. R. Curtis, M.D., Chairman. We wish to recommend that this committee follow up on the past resolutions that have been made. The University of Utah College of Medicine has not yet established a special course in the adoption of children but that material is included in the teachings in the Department of Obstetrics. We move the report be accepted.

The motion was voted upon and accepted.

Utah Health Council

Report on the Utah Health Council Committee, page 45 in the Handbook. A member of this committee was present and indicated that the committee had not met during the year. However, there had apparently been a lot of publicity, radio and television programs presented. The committee accepts the report and suggests that the committee meet at least once a year. We move acceptance.

The motion was voted upon and accepted.

Medical-Legal

The next report by the Medical-Legal Committee is on page 25 of the Handbook. This committee made reference to the low rate of threatened malpractice suits this year and the committee wishes to emphasize that it offers physicians opportunity to seek consultation on any questionable case and suggests keeping better office and hospital records as a means of improving the medical-legal aspects in the practice of medicine. Our committee accepts this report and recommends it be approved.

The motion was voted upon and accepted.

Resolution Number Three

The committee has no particular fight with Resolution Number III, introduced by Dr. Nelson. Apparently all they are interested in so far as we could tell is a progress report from the Liaison Committee in establishing a general practice section in the University of Utah College of Medicine. A member of the Liaison Committee was present and informed us that their Liaison Committee has already met with the Board of Trustees of the university and also with the University of Utah College of Medicine and the problem is being considered. Therefore, we see no objection to passing this resolution. It is our recommendation that it be accepted.

The motion was voted upon and accepted.

Resolution Number One

I think you all have a copy of Resolution Number I. The committee debated long and hard

at this and had lots of help from the other members who were present. Frankly, we ran into a stone wall. This is apparently a problem that is urgent as well as rather baffling in many parts. We were unable to reach a conclusion on this resolution, particularly on the last paragraph: "Now, therefore, be it resolved that such a contract to provide service benefits to those persons with individual annual income not to exceed blank dollars." We could not reach any conclusion or recommend any annual income amount, "and that participating physicians shall accept as full payment for such service benefits," a certain percentage. We could not arrive at any estimated percentage of the "Average Index of Fees as published by the Utah State Medical Association." It is our recommendation that this resolution be put to the floor for debate.

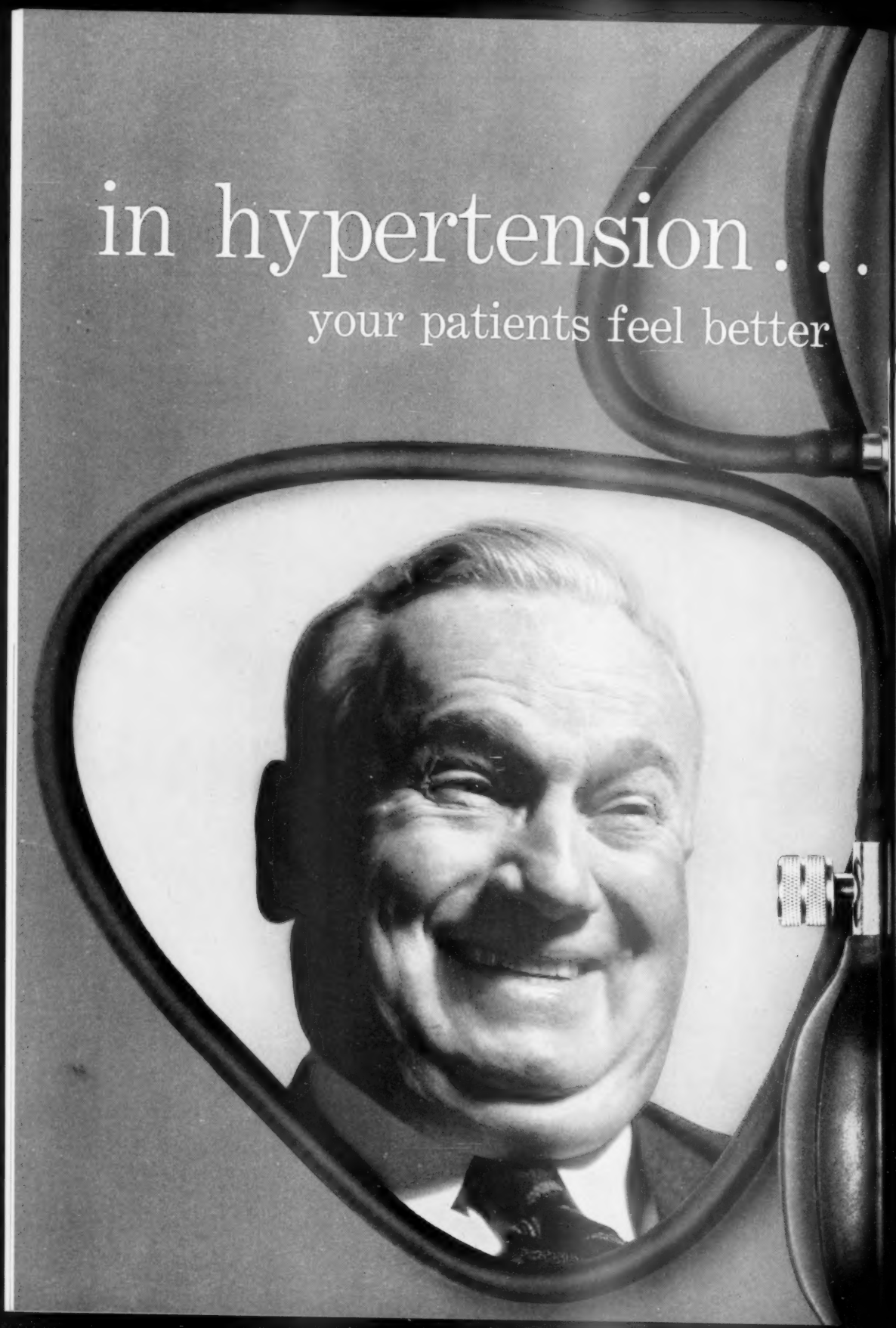
Speaker Petersen: I would like to call on Dr. Paul Clayton to discuss this because I feel he probably knows more about it than all the rest of us put together.

Dr. Clayton: Well, to bring this in the form of a motion, I would move that the two blanks in the last paragraph reading: "Those persons with individual annual income not to exceed $1,800.00 single and $2,400.00 married and that participating physicians shall accept as full payment for such service benefits 50 per cent of the Average Index of Fees as published by the Utah State Medical Association."

Now there are some implications in these figures and the doctors themselves must set the policy here. It isn't one for Blue Shield to decide. Now the reason that I suggested $1,800.00 for a single person and $2,400.00 for a married couple, or the 65 age group, is because, first: Utah is a relatively low income state and I think that the $1,800.00 a year or $150.00 a month is about the minimum that any single person can get accommodations for in a nursing home. I mean that is about the minimum standard of a nursing home, at least in this area and in Salt Lake area. With two people, of course, $2,400.00 a year; that doesn't represent a lot of money and any type of monthly payment for medical care would be a definite financial burden to these people but at the same time I am sure there are areas, particularly in the rural part of the state, where the monthly take-home pay of a married man with a family might not exceed $3,000.00 a year or $250.00 a month, and we are actually selling our standard contracts and have to those individuals which pay you 10 per cent and also cover the hospital cost of $115.00 a month, so I think that the $2,400.00 income for the two-party contract would be about right.

Now, the reason for the 50 per cent of Average Index Fees is, of course, to be able to reduce the premium on the Blue Shield side of the contract to a point that it brings the monthly payments of medical care down to an area where these people

continued on 120


in hypertension . . .
your patients feel better

The hypertensive under treatment is frequently burdened with side effects of therapy including states of depression, fatigue, and lethargy. He finds little joy left in his life and laughter is almost a forgotten experience.

With RAUTENSIN and RAUVERA, two unique and dependable antihypertensive agents, patients feel better, have a brighter outlook and blood pressure is safely reduced.

in mild hypertension

RAUTENSIN provides smoother antihypertensive action with no sudden rebounds or abrupt declines, and can be given over long periods of time without impairing mental alertness, producing excessive lethargy or drowsiness. When tachycardia is present, RAUTENSIN slows heart rate 10 to 15 per cent. RAUTENSIN is less likely to cause mental depression.[1] The apprehensive hypertensive is calmed, yet side actions are " . . . either completely absent or so mild as to be inconsequential."[2]

RAUTENSIN®

each tablet contains 2 mg. of the purified alseroxylon complex of Rauwolfia serpentina

Dosage: For the first 20 to 30 days, 2 tablets (4 mg.) once daily, at bedtime. Thereafter, a maintenance dose of 1 tablet (2 mg.) daily will suffice for most patients.

in moderate to severe hypertension

RAUVERA produces smooth and steady antihypertensive action which persists over the entire twenty-four hours without peaks and valleys . . . no "saw tooth" effect. Patients show a marked subjective as well as objective improvement with a significant drop in blood pressure, yet with a very low incidence of side effects.[3] Abrupt rise in blood pressure does not occur even when therapy is interrupted.[4] Tolerance does not develop on prolonged administration. Sensitization reactions or postural hypotension do not occur. Headaches, fatigue, insomnia and "heart consciousness" rapidly disappear, leaving the patient feeling well and asymptomatic.

RAUVERA®

each tablet contains 1 mg. of purified alseroxylon complex of Rauwolfia serpentina and 3 mg. alkavervir (Veratrum viride fraction)

Dosage: One tablet 3 or 4 times daily, ideally after meals, at intervals of not less than 4 hours.

1. Moyer, J. H.: Dennis, E., and Ford, R.: Arch. Int. Med. *96*:530, 1955.
2. Terman, L. A.: Illinois M. J. *3*:67, 1957.
3. La Barbera, J. F: M. Rec. & Ann. *50*:242, 1956.
4. Bendig, A.: New York J. Med. *66*:2523, 1956.

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feel that it might be worthwhile. Even then we may be out of the price range of a large group of those people, but at least we will have the contract which we plan to offer to anyone over age 65 who wants to buy it. There may be some restrictions. There will have to be. We can't sell contracts to someone with congestive heart failure today so that he can get medical care tomorrow, but then those problems can be worked out by an actuary with limitations on the contract.

What we are trying to do is be in the market that we can say anyone will buy, and we will furnish them with medical services for a set figure per month by you, the doctors. The representatives of the doctors, have got to tell us where we are going to obtain that income and how much cut in your fees you are willing to accept on this group of people.

Much discussion followed and several proposals were advanced and discussed. The resolution was then ordered referred to a committee.

Reference Committee Number Four

Speaker Petersen: The next order of business is the report of Reference Committee Number Four on Constitution and By-Laws and other Constitutional Matters, Dr. Child, Chairman.

Dr. Child: I don't have any controversial matters so we will move on pretty fast. This committee was composed of Dr. Marvin Lewis, Ogden; Alan Lindsay, of Salt Lake; Richard Call, of Provo; Howard Sharp, of Salt Lake.

Constitutional matters brought before this committee for consideration included the report of the Mental Health Committee on page 28 of the Handbook. There is a typographical error in the second line of the second paragraph that reads: "Contracts." I am sure that the committee report intended this to read "Contacts," and we recommend that that be changed. The committee would also as a point of information like to ask anybody on this particular Mental Health Committee if they are here, if Dr. Darke, the psychiatrist is here, concerning paragraph 3 where it states—maybe Mr. Aadnesen knows this—"The committee recommended that laws in the State of Utah concerning epilepsy be reviewed and brought more in line with the present advanced knowledge and status of epilepsy." We are ignorant of what laws exist at the present time.

And the other is concerning driving licenses of an epileptic. We have no concern about this. We just thought it ought to come out for discussion. We approve this report with those comments and so move.

The motion was voted upon and approved.

Trauma Committee

Your reference committee approves the report of the Trauma Committee as printed and adds the following two paragraphs, one numbered 7 after the report's paragraph 6:

"It is recommended that the Trauma Committee of the Utah State Medical Association continue its educational program directed toward physicians and lay groups with regard to automobile safety belts and other safety features in automobiles."

"We as a reference committee suggest the Trauma Committee be encouraged to continue in the coming year to consider the need for establishing a poison and toxicology control center in the State of Utah."

With those recommendations, Mr. Speaker, we move this report be accepted.

The motion was voted upon and approved.

Civil Defense

The report of the Civil Defense Committee, page 30, is a long report. Basically it chides us for inaction. We, as a profession, the lay people of the State of Utah, the governmental agencies, are not really doing very much in the field of civil defense. We as a reference committee accept this report.

The motion was voted upon and approved.

Air Pollution

Report of the Air Pollution Committee, page 35. The chairman of that committee, Dr. Russell Nelson, met with the reference committee. I would like to insert the comment that there appears to be only two major sources of problems at the present time in the State of Utah on the air pollution program. One is the program that Salt Lake

City has and has had for some time and the other is a private research study that is under the supervision of Dr. Richard Call in Provo. This reference committee recommends that the report be accepted as printed.

The motion was voted upon and accepted.

The Second Interim Meeting of the House of Delegates of the Utah State Medical Association adjourned at 4:10 p.m., March 25, 1959.

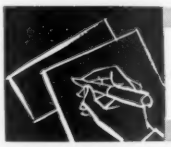
MONTANA

Obituary

J. S. BEAGLE

John S. Beagle, M.D., died at his home in Sidney, Montana, on April 2, 1959. Dr. Beagle was born July 24, 1873, at Eden Station, Wisconsin. He graduated from Hahnemann Medical College, Philadelphia, in 1896. After practicing in Minnesota for several years, Dr. Beagle moved to Sidney, Montana, in 1909, where he continued a general practice of medicine until his retirement a few months ago.

Dr. Beagle was very active in this Association and in community affairs in Sidney. He was a member of this Association, the American Medical Association, and the American Geriatrics Society.



CORRESPONDENCE

To the Editor:

I have just finished reading with interest and some amazement your editorial on political plugs from doctors in the April, 1959, Rocky Mountain Medical Journal.

Doctors have climbed down from their pink celestial cloud to a lofty perch on political matters. They realize that they must express themselves on medical legislative matters, and are frequently involved in writing their representatives in their state and federal government as to their views on certain pending legislation. This is as it should be.

However, because we remain on a lofty perch, away from mere partisan party politics, we find ourselves most frequently in the position of opposing left wing legislation and, needless to say, our opinions usually fall on unsympathetic ears.

We should return to the dictates of Abraham Lincoln on how to get elected, that is to aid in a political party of our choice, work hard in a ward and precinct level to support that political party of our choice, and encourage by all manner of ethical means the candidacy and election of people who are sympathetic to our own political views.

It is my humble opinion that a doctor who does not work in party politics has lost his honest right to be heard when he bellyaches about the present or recent past political complexion of the country. Perhaps we had better take another step and get off our perch down to level ground on political matters.

David Gregory, M.D.
(Glasgow, Montana)

As you like it . . . cont. from 5

Lawrence E.: Hemolytic Disorders: Some Highlights of Twenty Years of Progress, Ann. Int. Med. **49**, 1084 (November) 1958.

10. "Striking similarities have become apparent between idiopathic thrombocytopenic purpura and idiopathic auto-immune hemolytic disease. Both appear to be associated with a form of auto-immunization. Both occur more commonly in females. Both are frequently relieved by administration of ACTH or corticosteroids, and in some cases by splenectomy, but relapse is a constant threat in both disorders. Both may occur simultaneously or sequentially in the same patient." ibid, page 1084.

THE BOOK CORNER

New books received

New books received are acknowledged in this section. From these, selections will be made for reviews in the interests of the readers. Books here listed will be available for lending from the Denver Medical Library soon after publication.

Fundamentals of Otolaryngology: By Lawrence R. Boies, M.D. Third edition. Phila., W. B. Saunders Co., 1959. 510 p. Price: $8.00.

Hearing: Handbook for Laymen: By Norton Canfield, M.D. Garden City, Doubleday & Co., Inc., 1959. 214 p. Price: $3.50.

Ciba Foundation, Symposium: Biosynthesis of Terpenes and Sterols. Boston, Little, Brown & Co., 1959. 311 p. Price: $8.75.

Navy Surgeon: By Herbert Lament Pugh, Rear Admiral, Ret. Phila., J. B. Lippincott Co., 1959. 459 p. Price: $5.00.

A Doctor Remembers: By Edward H. Richardson, M.D. New York, Vantage Press, 1959. 252 p. Price: $3.95.

Book Reviews

Ideals in Medicine; A Christian Approach to Medical Practice: By Vincent Edmunds, M.D., M.R.C.P., and C. Gordon Scorer, M.B.E., M.D., F.R.C.S. Chicago, Christian Medical Society, 1958. 192 p. Price: $3.00.

This is a series of essays about ethical, financial, social and religious views of the practice of medicine, written from the standpoint of the Christian physician.

For those who believe that ministry to the body is second only to ministry to the soul, this will be a thought-provoking book. This would be a good book for one who is contemplating entering medical practice, for it points up many of the nontangible rewards of medicine to those who value them.

This book is written in the typical style for which the British literature is well known.

W. Grayburn Davis, M.D.

Peptic Ulcer and Psychoanalysis: By Angel Garma, M.D. Baltimore, Williams & Wilkins, 1958. 143 p. Price: $6.00.

This book illustrates two of the disconcerting qualities of much psychoanalytic literature (particularly for the non-analyst, but, in lesser measure, for the analytically-trained as well): (1) the seeming need of each writer to arrive at his own personal explanation of such widely-studied psychosomatic phenomena as, say, peptic ulcer, and (2) the "unscientific" or subjective quality of the evidence marshaled for the theory. Thus, the investigator reporting may be suspected of selecting out of an enormous mass of associative material that which fits his needs; or of assuming much too much, as when Garma offers a startling interpretation of a Mutt and Jeff comic strip in which Jeff loses his false teeth, stuck in a milk caramel, on the floor of a cinema (p. 106). In all this, the analytically-trained reader will recognize how much Garma's theories actually have in common with some other psychoanalytic writings, especially Melanie Klein's, to whom he makes only passing reference, and will have sympathy for the enormous difficulty of documenting almost any aspect of the unconscious convincingly in a short monograph. Other physicians will at least find the book provocative, entertaining, and useful as a sourcebook and bibliography, though otherwise of very little help clinically.

Aaron Paley, M.D.

Psychiatry and the Criminal: By John M. Macdonald, M.D. Charles C. Thomas, 1958. 213 p.

Forensic or so-called "legal psychiatry" is a field that has traditionally been fraught with much misunderstanding, confusion and at times a dreadful amount of unrealistic consideration. It is frequently a subject that is approached with fear and trepidation on the part of both physician and psychiatrist, primarily because of a lack of knowledge in the field. Because of this, it is extremely gratifying to find a book such as this which, for a change, presents this subject in a most clear, concise, and useful manner.

The book, as noted in its subtitle, is primarily a guide to psychiatric examinations for criminal courts. It, however, entails much more than this and actually presents most lucid discussions of the origins of criminal behavior, of various tests of criminal responsibility both from their historical and current points of view, and various types of psychiatric diseases and problems in terms of their possible relationship to criminal behavior. The discussions of the actual psychiatric examinations, including many interesting examples and

case histories, are very clearly presented and would be most valuable to anyone called upon to perform such a service in his own practice. The various "tricks of the trade" in the difficult differentiation between actual and feigned mental illnesses are clearly presented and would be extremely valuable to anyone who has not had experience in this type of evaluations.

In the reviewer's opinion, two of the most interesting points brought out in this book are: (1) The entirely different points of view of the criminal act as seen by psychiatry and the law; (2) the book's handling of the problems of the psychiatrist on the witness stand. The consideration of these two things makes it much more understandable as to why these two fields have difficulty in understanding each other and also presents valuable information on how to conduct one's self in a court of law.

I feel that this book is a must for all psychiatrists and of above average interest to all physicians, particularly those who are called upon to testify in court.

F. Bruce Merrill, M.D.

The Birth of Normal Babies: By Lyon P. Strean, M.Sc., Ph.D., D.D.D., F.A.P.H.A. New York, Twayne Publishers, 1958. 194 p. Price: $3.95.

A subtitle on the cover declares this to be "The latest scientific information on how to overcome the factors that cause miscarriages, stillbirths, and congenital abnormalities." The author's theories on causation of monstrosities revolve about maternal injuries, major and minor, and use of hormones and lack of certain vitamins. He gives 60 case histories to support his views but no real scientific evidence except statistical. Others studying the problem will find this a very interesting and controversial volume. To the practitioner it has limited value.

What We Do Know About Heart Attacks: By John W. Gofman, M.D. New York, G. P. Putnam's Sons, 1958. 180 p. Price: $3.50.

John W. Gofman, in his recently published book, "What We Do Know About Heart Attacks," has presented in a most concise, lucid, and encompassing manner the latest knowledge pertaining to heart disease. The book is written with the heart patient in mind, and is designed to better educate the lay reader in the etiological, preventive, and therapeutic mechanics of heart disease. This book should also hold considerable appeal to any physician seeking a brief resumé of the current data on heart disease. It is highly recommended for its extremely interesting, enjoyable, and clearly written content.

Robert G. Volz, M.D.

Maternity; A Guide to Prospective Motherhood: By Frederick W. Goodrich, Jr., M.D. Englewood Cliffs, Prentice-Hall, Inc., 1959. 130 p. Price: $1.75.

Taken as a whole, this is one of the best books of its kind that the reviewer has seen. The only objection to the book would be the chapter headed "Some Do's and Dont's." This probably is a personal antipathy which is certainly non-conforming. In the discussion of diet, the old listing of foods in vogue for a century is repeated without the statement that allergies and individual idiosyncrasies must be recognized. Having seen certain patients of certain religious persuasions, who prohibit meats, go through pregnancy normally and deliver normal children, one questions the absolute necessity of meat. The old myth of milk is again repeated. A study of the chemical composition of foods will readily disclose that there are no proteins, carbohydrates, fats, vitamins, or minerals in milk that cannot be obtained from other sources. While the human makes good use of milk and its products for food, certainly it is not essential. Under natural circumstances, no one would have a drop of milk in his mouth after being weaned from his mother's breast. The restriction of salt is another controversial item since no one has proved that abnormal weight gain and edema are directly related to its retention. The statement is made that weight gain is strictly a matter of diet. This is much oversimplified as hypothyroidism, edema, toxic and non toxic, and the uncontrollable gain in certain endocrine types are frequent exceptions. With these few exceptions, the reviewer considers this an excellent book.

A Doctor Discusses Menopause: By G. Lombard Kelly, M.D. Chicago, Budlong Press, 1959. 90 p. Price: $1.50.

This is a well-written book for the laity. It dispels in easy to understand language the superstitions and false ideas that most women have of this critical period. It would be well if every understanding woman could read this type of book before the menopause actually arrives.

John R. Evans, M.D.

"Well! What's taking you so long in bringing me that new medical supply catalogue!"

The Colorado State Medical Society

Rocky Mountain Medical Conference, September 8-11, 1959
Denver

President: John I. Zarit (Chairman of the Board), Denver.
President-elect: John L. McDonald, Colorado Springs.
Vice President: Robert P. Harvey (Vice Chairman of the Board), Denver.
Treasurer: William C. Service, Colorado Springs, 1959.

Constitutional Secretary: Harry C. Hughes, Denver, 1960.
Additional Trustees: Bernard T. Daniels, Denver, 1959; Carl W. Swartz, Pueblo, 1960; Fred R. Harper, Denver, 1961; Walter M. Boyd, Greeley, 1961.

Delegates to A.M.A.: Kenneth C. Sawyer, Denver, 1960; (Alternate, Gatewood C. Milligan, 1959); E. H. Munro, Grand Junction, 1959; (Alternate, H. E. McClure, Lamar, 1959); I. E. Hendryson, Denver, 1959; (Alternate, C. C. Wiley, Longmont, 1959).

Executive Secretary: Mr. Harvey T. Sethman, 835 Republic Building, Denver 2, Colorado; Telephone AComa 2-0547.

Montana Medical Association

Annual Meeting, September 17-19, 1959
Butte

President: Herbert T. Caraway, Billings.
President-elect: Leonard W. Brewer, Missoula.
Vice President: Raymond F. Peterson, Butte.
Secretary-Treasurer: W. E. Harris, Livingston.
Assistant Secretary-Treasurer: Jess T. Schwidde, Billings.

Executive Committee: Herbert T. Caraway, Billings; Leonard W. Brewer, Missoula; Raymond F. Peterson, Butte; W. E. Harris, Livingston; John A. Layne, Great Falls; Edward S. Murphy, Missoula.

Delegate to American Medical Association: Paul J. Gans, Lewiston; alternate, S. C. Pratt, Miles City.

Executive Secretary Mr. L. R. Hegland, P.O. Box 1692, Telephone 9-2585, Billings.

Nevada State Medical Association

Annual Meeting, August 19-22, 1959
Reno

President: Roland Stahr, Reno.
President-elect: Ernest W. Mack, Reno.
Secretary-Treasurer: William A. O'Brien, III, Reno.

Delegate to American Medical Association: Wesley W. Hall, Reno; alternate: Earl N. Hillstrom, Reno.

Executive Committee: Roland Stahr, Reno; Ernest W. Mack, Reno; William A. O'Brien, III, Reno; Wesley W. Hall, Reno; Earl N. Hillstrom, Reno; Stanley L. Hardy, Las Vegas; Thomas S. White, Boulder City; John M. Read, Elko; John M. Moore, East Ely; William M. Tappan, Reno.

Executive Secretary: Mr. Nelson B. Neff, P. O. Box 188, Reno; telephone FA. 3-6788.

New Mexico Medical Society

President: Lewis M. Overton, Albuquerque.
President-elect: Allan L. Haynes, Clovis.
Vice President: William E. Badger, Hobbs.
Secretary-Treasurer: Thomas L. Carr, Albuquerque.

Councilors: Wendell H. Peacock, Farmington, 1960; George W. Prothro, Clovis, 1960; Gerald A. Slusser, Artesia, 1960; W. J. Hossley, Deming, 1961; Guy E. Rader, Albuquerque, 1961; Robert P. Beaudette, Raton, 1962; William R. Oakes, Los Alamos, 1962.

Delegate to American Medical Association: Earl L. Malone, Roswell, 1960; Alternate: Samuel R. Ziegler, Espanola, 1960.

Executive Secretary: Mr. Ralph R. Marshall, 220 First National Bank Building, Albuquerque, telephone CH 2-2102.

The Utah State Medical Association

Annual Session, September 15-18, 1959
Salt Lake City

President: U. R. Bryner, Salt Lake City.
President-elect: I. Bruce McQuarrie, Ogden.
Secretary: J. Poulson Hunter, Salt Lake City.
Treasurer: Robert M. Dalrymple, Salt Lake City.

Councilors: Box Elder, 1960, D. L. Bunderson, Brigham City; Cache Valley, 1960, C. J. Daines, Logan; Carbon County, 1960, A. R. Demman, Helper; Central Utah, 1959, Stanford Rees, Gunnison; Salt Lake, 1960, Richard W. Sonntag, Salt Lake City; Southern Utah, 1960, James S. Prestwich, Cedar City; Uintah Basin, 1960, R. Bruce Christian, Vernal; Weber County, 1961, Wendell J. Thompson, Ogden; Utah, 1959, R. E. Jorgenson, Provo.

Executive Committee: U. R. Bryner, Salt Lake City, Chairman; Reed W. Farnsworth, Cedar City; I. Bruce McQuarrie, Ogden; J. Poulson Hunter, Salt Lake City; Robert M. Dalrymple, Salt Lake City.

Delegate to American Medical Association, 1957-1959: Kenneth B. Castleton, Salt Lake City; Alternate, Drew Petersen, Ogden.

Executive Secretary: Mr. Harold Bowman, Salt Lake City.

The Wyoming State Medical Society

Annual Session, June 11-14, 1959
Jackson Lake Lodge

President: L. Harmon Wilmoth, Lander.
President-elect: Benjamin Gitlitz, Thermopolis.
Vice President: Francis A. Barrett, Cheyenne.
Secretary: S. J. Giovale, Cheyenne.
Treasurer: C. D. Anton, Sheridan.

Councilors: Albany County, B. J. Sullivan, Laramie; Carbon County, Guy Halsey, Rawlins; Converse County, Roman Zwalsh, Glenrock; Fremont County, Bernard Stack, Riverton; Goshen County, Joseph Volk, Torrington; Laramie County, S. J. Giovale, Cheyenne; Natrona County, Frederick Haigler, Casper; Sheridan County, Jay Blumenstock, Sheridan; Teton County, Robert Knapp, Pinedale; Uinta County, Joseph Whalen, Evanston; Northeastern Wyoming, Virgil L. Thorpe, Newcastle; Northwestern Wyoming, John H. Froyd, Worland.

Delegate to A.M.A.: A. T. Sudman, Green River, 1960; Alternate, B. J. Sullivan, Laramie, 1960.

Executive Secretary: Mr. Arthur R. Abbey, Cheyenne.

School children should wear identification tags

Identification tags for school children were suggested by a physician who cared for many who were burned in the Chicago school fire last December.

Identification of badly burned or injured children is often difficult because they rarely carry wallets or other means of identification, according to Dr. James E. Seagraves, director of the disaster plan at St. Anne's Hospital, Chicago.

More than 50 children were taken to St. Anne's Hospital from the Our Lady of Angels School fire. Of these, 10 were either dead on arrival or died shortly thereafter.

"Identity was often incomplete," Dr. Segraves said, "and even parents were unable to identify for sure some of the most severely burned children."

Identification tags would alleviate this difficulty, he said in a report on the hospital's disaster medical plan in the May 16 Journal of the American Medical Association.

Dr. Segraves also recommended as a result of his hospital's experience that personnel in each city police district be familiar with the hospitals in their district and know just how many casualties each could care for at one time.

St. Anne's Hospital has long had a plan for meeting major medical emergencies. On the whole, the plan worked well after the school fire, Dr. Segraves said.

He offered the following suggestions for disaster planning by hospitals:

The plan must be simple and familiar to all hospital personnel. Frequent practice sessions are necessary.

Mass disaster situations must be postulated and the first 24 hours of treatment must be outlined in detail long before any disaster occurs.

Stockpiles, based on the outlined 24 hours of treatment, must be kept available.

The team approach is the only logical one if chaos is to be prevented, and the team must be under the direction of one man.

Parliamentary sheets available

For those interested in presiding or taking part in medical meetings, George F. Schmitt, M.D., 30 S. E. 8th Street, Miami, Florida, a registered parliamentarian, has published two sheets on parliamentary procedure. Send a stamped self-addressed long envelope for your free copies.

WANT ADS

MEDICAL DENTAL ARTIST—Illustrations, charts, graphs, medical animations, exhibits. Formerly on staff, University of Illinois Medical-Dental School. Reference: Local and national member of Association of Medical Illustrators. Burr Bush, 3150 South Humboldt Street, Englewood, Colorado, SUnset 1-3389. 5-53

GENERAL PRACTITIONER WANTED: Private practice within group for convenience. Montana community with excellent hospital facilities. Please write Box 569, Miles City, Montana. 34TF

PHYSICIAN NEEDED, Norwood, Colorado, San Miguel County. Population 500, large area to draw from. Small hospital, furnished with beds, linen, desks. Good schools, two churches, drug store. Good climate. Elevation 7,015. Oiled highway, stock raising, farming, near uranium fields. Civic clubs and lodges. Hunting and fishing. Reply to: Community Hospital of Norwood, Norwood, Colorado. 11TF

SPACE available in new air conditioned Medical Building in Colorado Springs, Colorado. Location excellent for Generalists, Specialists, or Dentists. Ample off street parking. Near new hospital and adjacent to a large shopping center. Will partition to suit. E. H. Vincent, M.D., Suite No. 1, Madison Medical Building, 2121 North Weber Street, Colorado Springs, Colorado. Phone MElrose 2-9386. 4 TF.

"LOCUM TENENS. Would like temporary medical location (practice) during month of July between end of internship and duty with Medical Corps, U. S. Army. Have Colorado medical license. Married. Please contact B. R. Withers, M.D., 1216 Clayton Street, Denver 6, Colorado."

FOR SALE: Modern Medical Clinic, fully equipped. Good location. Modern 35 bed hospital three blocks away. Practice well established. Asking price same as gross for one year. Gross, $40,000 cash last eight months. Buyer should do major surgery. New ultra modern brick home also for sale. Write Box 5-1TF, Rocky Mountain Medical Journal, 835 Republic Building, Denver 2, Colorado. Shown by appointment. 5-1tf

PRACTICE AVAILABLE—established Colorado general practice in Western Slope city of 12,000 population, 100-bed hospital; leaving for residency. Write Box 5-12, Rocky Mountain Medical Journal, 835 Republic Building, Denver 2, Colorado. 5-12

NEVADA COMMUNITIES seeking physicians include Wells, Carlin, Austin, Beatty, Ploche, and Hawthorne. Write Mr. Nelson B. Neff, Executive Secretary, Nevada State Medical Association, P. O. Box 188, Reno, Nevada, for further information regarding these opportunities. 5tf

WANTED: General Practitioner, excellent opportunity, in new office building with three well established physicians. Immediate practice assured, located in the southwest in an industrial, tourist and farming community. Write Box 5-22, Rocky Mountain Medical Journal 835 Republic Building, Denver 2, Colo. 5-22

FOR SALE: G.E. cardioscribe, 15 milleamp G.E. x-ray machine and accessories, examining table, treatment cabinets, Tompkins suction, McCarthy cystoscope, other medical equipment. Good condition, reasonably priced to settle estate. Mrs. E. M. Morrill, Rt. 1, Box 301, Fort Collins, Colorado. 62

MEDICAL SUITES available in new air-conditioned building. Northeast section of Colorado Springs. $3.50 up per square foot. Ample parking space. Call Dr. J. P. Munson, MElrose 4-0126. 61

ASSISTANT MEDICAL DIRECTOR. Immediate opening accredited hospital, 219 beds pulmonary diseases, 30 beds rehabilitation chronic illness. U. S. citizen, California license, tuberculosis experience. Under age 40, preferably married. Furnished modern house for family. Salary open. Write Medical Director, Tulare-Kings Counties Hospital, Springville, California. 632

FOR SALE—Complete office equipment for small-town general practice, includes modern, almost new Keleket X-ray, two examining tables, modern furniture and instruments including emergency operating room supplies. Call or write Harry G. Knapp, M.D., Rifle, Colorado. 64